Avery Weigh-Tronix

# Evolution Series

## Digital indicator system

***E1205 and E1210***

# *Operating Instructions*

**ENGLISH**

This manual for Build 5
standard and beyond

*76103-950 Issue AG May 2010*

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**IMPORTANT**

When programming or configuring the equipment you must ensure that you comply with all relevant standards and legislation. The example settings given in this book may not be legal for trade with the public.

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# 1 Warnings

## Installation and Service

THE EQUIPMENT CONTAINS NO USER SERVICABLE COMPONENTS.

Installation and maintenance of the equipment must only be carried out by trained and authorised personnel.

## 1.1 Environmental Parameters

| | |
|---|---|
| Power Requirements: | 110-240 VAC 50/60Hz 1.85Amps |
| Climatic Environment: | -10 to +40°C, closed, noncondensing |
| EM Classification: | E2 |
| Weight: | 3.75kg (E1105, E1205)<br>5kg (E1110/E1210) |
| Dimensions: | 280mm W x 280mm H x 110mm D |

## 1.2 Safe installation

For your protection all mains (110V or 230V) equipment used out of doors or in wet or damp conditions should be supplied from a correctly fused source and protected by an approved 30 mA Residual Current Device (RCD) to BS7071 or BS7288 or IEC1008-2-2 BS EN 61008:1995.

The mains lead must be connected to a supply outlet with a protective earth contact. The electrical supply at the socket outlet must provide over current protection of an appropriate rating.

Pluggable equipment must be installed near an easily accessible socket outlet. Isolate the machine by unplugging from the socket outlet.

## 1.3 Safe use

### 1.3.1 Routine maintenance

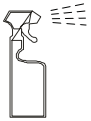
**To avoid the possibility of electric shock or damage to the machine, always switch off the machine and isolate from the power supply before carrying out any routine maintenance.**

To avoid the risk of the machine falling, where applicable, ensure that it is placed securely on a flat and level surface.

### 1.3.2 Cleaning the machine

The outside of standard products may be wiped down with a clean cloth, moistened with water containing a small amount of mild detergent.

**Harsh abrasives, solvents, scouring cleaners and alkaline cleaning solutions, such as washing soda, should not be used especially on the display windows. Under no circumstances should you attempt to wipe the inside of the machine.**



**Do not spray any liquid directly onto the display windows. If you are using a proprietary cleaning fluid ensure you spray the cloth and not the display.**

### 1.3.3 Training

Do not attempt to operate or carry out any procedure on a machine unless you have received the appropriate training or read the Instruction Books.

To avoid the risk of RSI (Repetitive Strain Injury) it is important to ensure that the machine is placed on a surface which is ergonomically satisfactory to the user. It is recommended that frequent breaks are taken during prolonged usage.

### 1.3.4 Sharp objects

Do not use sharp objects (screwdrivers, long fingernails etc.) to operate the keys.

### 1.3.5 EMC compliance

The following warning may be applicable to your machine.

WARNING:This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

# 2 Getting started

## 2.1 Description

The E12 Series is a range of digital indicators suitable for general weighing or more specialist applications such as check-weighing, counting, weighbridge applications, recipes and pack runs. The indicator can be connected to a printer, remote display or PC.

The E12 Series comprises the following products:

- E1205 indicator which comes in a plastic housing and is suitable for general use.
- E1210 indicator which comes in a stainless steel housing and is suitable for more rigorous environments such as damp or wet areas.

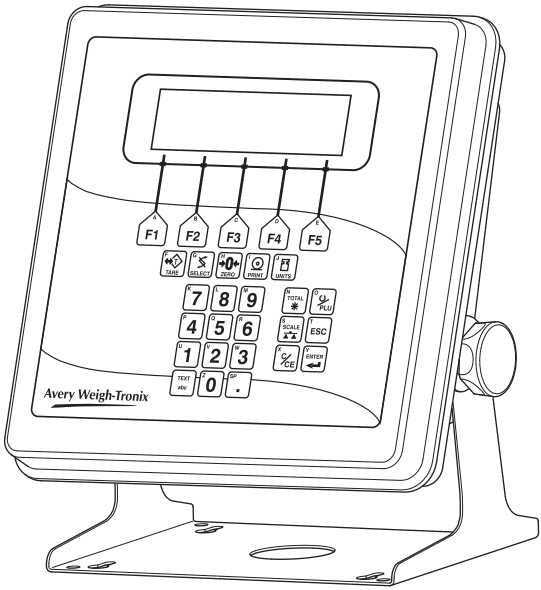



**Figure 2.1 E1210 indicator**

## 2.2 Displays and keys

### Overlay

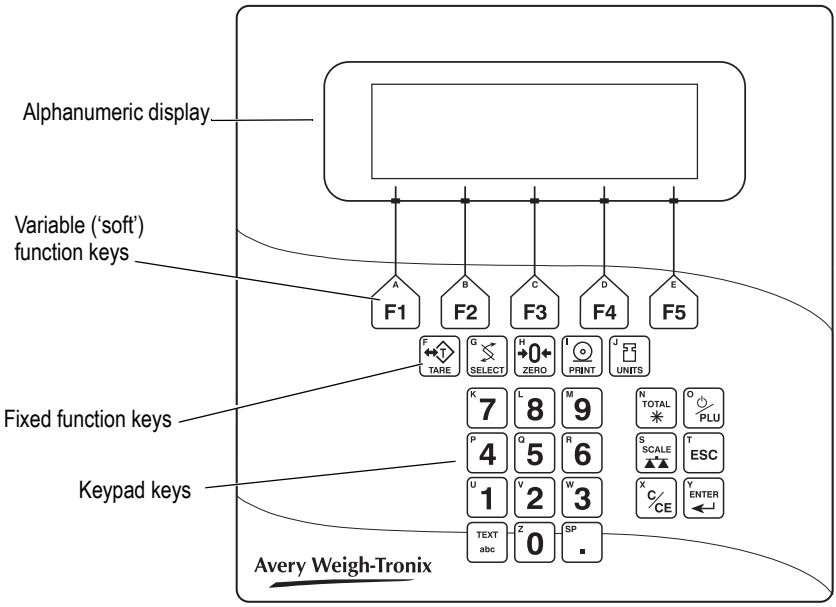



**Figure 2.2 E1205 / E1210 overlay**

## 2.3 Displays

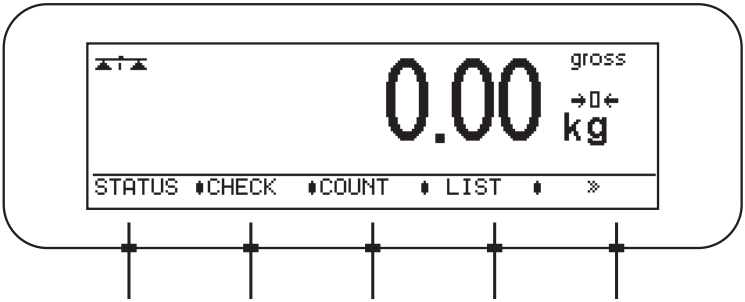



**Figure 2.3 Typical display (zero weight)**

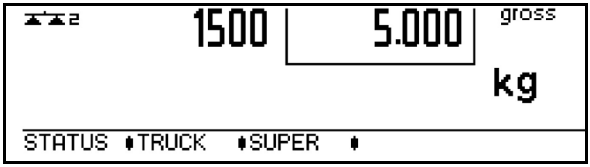



**Figure 2.4 Dual weight display example**

The indicator has an LCD display used to display weight information, icons and messages.

### Information icons

The following icons may be displayed:

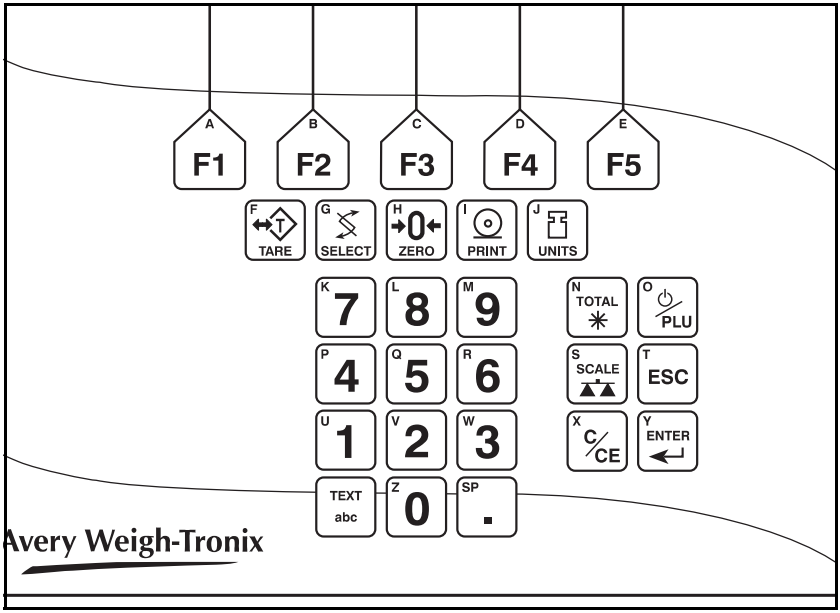
| | |
|---|---|
| gross | Display shows the gross weight. |
| tare | Display shows the tare weight. |
| net | Display shows the net weight. (Tare is in operation) |
| | The weight is unsteady. |
| pt | Preset tare in operation. |

| | |
|---|---|
| lb | Weight display in pounds. |
| kg | Weight display in kilogrammes. |

***Note:*** *When the displayed weight is not lb or kg but is a custom unit, the indicator displays the appropriate custom unit symbol.*

| | |
|---|---|
| OPI<br>OPII<br>OPIII | Illuminated output is active. |
| | The indicator is set to count mode. The value displayed is the number of items and not the weight. |
| | Print indication. |
| | Zero icon. |
| <br> | Scale 1 or scale 2.<br>Indicates the current scale. |

## 2.4 Keyboard




### General keys

The E1205 and E1210 indicators have the keys shown below.

***Note:*** *Your indicator may have some keys disabled.*

Tare key.
Set / cancel a tare weight.

Select key.
Toggle between the available weight readings (gross, tare, net).

Zero key.
Resets the display to show zero weight.

Print key.
Print weight information to connected printer (or other connected device).

Units select key.
Switch between the available units of measure (e.g. kg and lb).

Totals key.
Display the sub and grand totals.

Standby/PLU key.
Short press PLU key. Select a PLU.

Long press Standby key. Put the indicator into standby mode. Press again to set the indicator back to operator mode.

Scale select key.
Toggle between the connected scales / platforms.

Escape key.
Quit out of a menu option or cancel a numeric entry without accepting the value.

Clear/cancel key.
Clear entered values or cancel an operation.

Enter key.
Accept the value shown on the display.

Numeric keys for data entry.

Decimal point key.
Also used to enter negative values e.g. -7.0.

Text Key.
Press and hold to use keypad for text entry.

## Variable function (F) keys

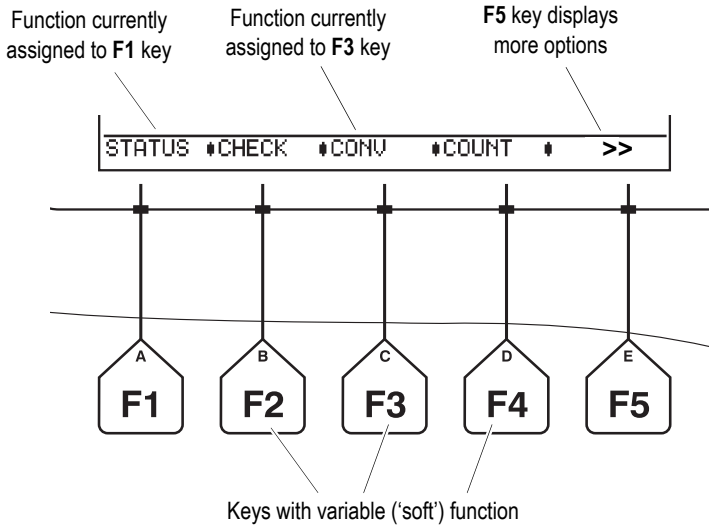



**Figure 2.5 Function keys**

Press a function key to select the option displayed above the key. The options available depend on the indicator operating mode and its configuration.

If there is no text or symbol above an ***'F'*** key, then it has no function at that time.

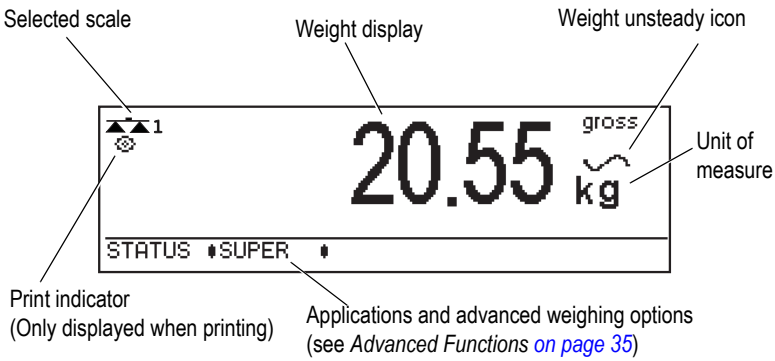
***Note:*** *Where you see* ***>>*** *press the appropriate* ***'F'*** *key to display more options.*

# 3 Basic weighing

## 3.1 Introduction

Basic weighing (operator) mode is the default mode of the indicator.

**Basic weighing display:**

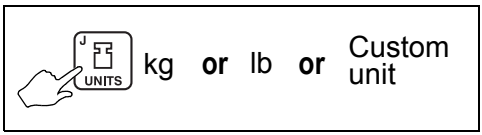



**Unsteady weight**

Indicates that the weight is not yet steady. Take your weight reading once this icon is no longer displayed.

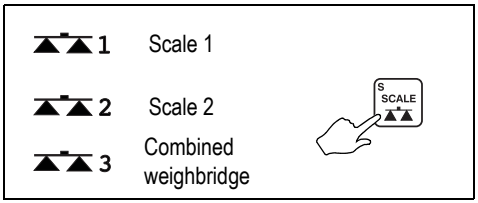
**Weight units**

Your indicator ***may*** have been configured to support multiple units of weight. Press the ***UNITS*** key to select between them.



### Select scale

Your indicator ***may*** have more than 1 scale connected. Press the ***SCALE*** key to select between them.




***Note:*** *WEIGHBRIDGE ONLY: For more information on combined weights see Combined weight / Long vehicles* *on page 93**.*

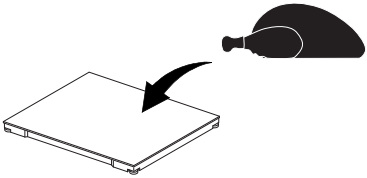
### Print

Your indicator may have a printer connected (or another device for reporting / storing the weight data).

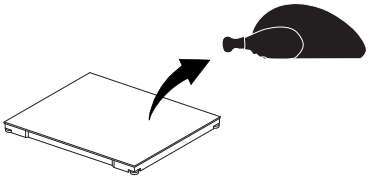
Press the ***PRINT*** key to send the weight to the printer or other connected device.

## 3.2 Weighing goods

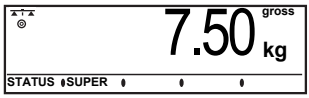
1. Ensure the scale is empty.
2. Check that the display reads zero. (Press the ***ZERO*** key if required.)
3. Place the goods on the scale.



4. Take the weight reading and ***PRINT*** if required.
5. Remove the goods from the scale.



Example displays



## 3.3 Tare / Net weighing

Tares are used when goods need to be packed into a container or weighed onto a vehicle. The tare function will subtract (tare off) the weight of the container (or vehicle) from the total weight on the scale.

- **Net Weight.** This is the weight of the goods in the container. The ***net*** weight is displayed when a tare is active.

***Note:*** *The type of tare available depends on how the machine was configured on installation.*

### 3.3.1 Push-button tare

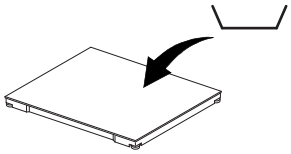
This sets the tare value by weighing the empty container.

**1.** Ensure the scale is empty.

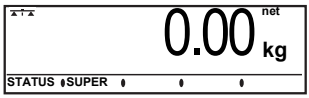
**2.** Check that the display reads zero. (Press the ***ZERO*** key if required.)

Example displays

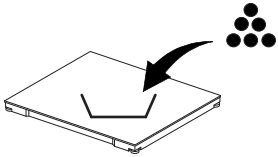
**3.** Put the container on the scale.

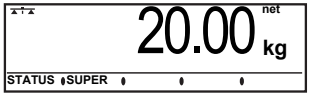


**4.** Press the ***TARE*** key.



**5.** Fill the container to the required weight.






**6.** Take the weight reading and ***PRINT*** if required.

**7.** Remove the filled container

### 3.3.2 To recall a stored tare

***Note:*** *This option is only available if stored tares have been set in the Supervisor Mode.*

**1.** Use the keyboard to enter the ID of the stored tare you want.

**2.** Press the Select key.

**3.** Press the Tare key.

***Note:*** *If the ID of the stored tare is wrong, the system displays an “INVALID ENTRY” message.*

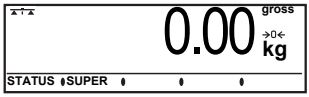
### 3.3.3 Keyboard tare

Keyboard tares are used to enter a known weight for a container.

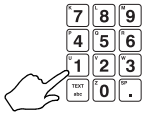
**1.** Ensure the scale is empty.

Example displays

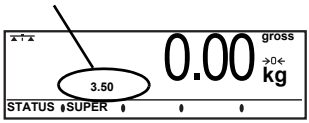
**2.** Check that the display reads zero. (Press the ***ZERO*** key if required.)



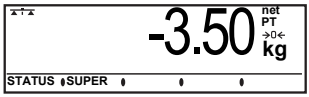

**3.** Use the keypad to enter the weight of the container.



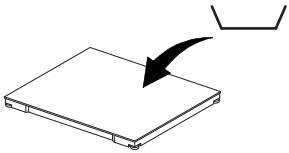

Example:
Container weighing 3.50kg



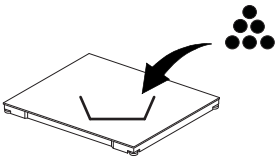

**4.** Press the ***TARE*** key.




**5.** Place the container on the scale.

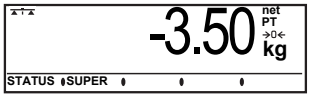


**6.** Fill the container to the required weight.

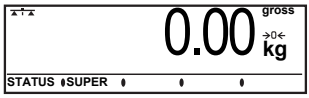


**7.** Take the weight reading and ***PRINT*** if required.

**8.** Remove the filled container.




**9.** Press ***C/CE*** then ***TARE*** to clear the tare.




## 3.3.4 Gross / Tare / Net display

**Select key**

Depending upon how your indicator was configured, the ***SELECT*** key may operate as follows:

- Press and hold to display the gross weight.
- Press to cycle between the gross, tare and net weight.
- No action - key not set up.

## 3.4 Totals

The indicator will keep a running total of each weighing transaction carried out at the scale.

### Updating totals

The totals are updated either by the application or, if so configured, by performing a ***print*** operation.

***Note:*** *Separate totals are kept for PLUs and some of the advanced weighing options. See the approproate applications chapters for details.*

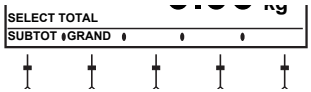
### Total key

The total key can be used to:

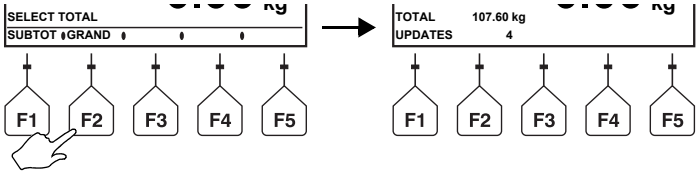
- Display totals and sub totals.
- Print and clear totals and sub totals.

**Displaying totals / Sub totals**

1. Ensure the indicator is in basic weighing mode. Press ***ESC*** if necessary.
2. Press the ***TOTAL*** key.




3. Press ***F1*** or ***F2*** to select sub or grand totals.

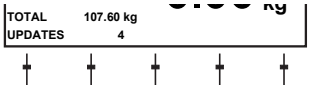


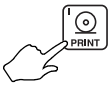

**Print / Clear totals**

(Continued from above)

**CAUTION:** The totals are automatically cleared after printing.

**4.** With the totals displayed, press the ***PRINT*** key.



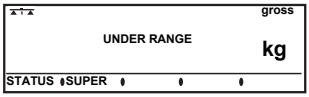

**5.** If prompted enter the appropriate password.

Default user password

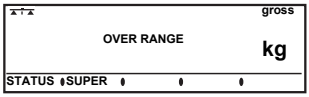
**6.** Press ***ESC*** to return to basic weighing.

## 3.5 Weighing errors

### Under/over range




Weight under range




Weight over range

If you see one of the above error conditions you should:

1. Make sure that there are no items or debris on the scale.
2. Press ***ZERO***.

If the indicator still does not show zero:

3. Disconnect and reconnect the power cable.
4. Contact your Avery Weigh-Tronix support centre.

## 3.6 PLUs

PLUs (Product Look-Up) are used to store information about a particular product.

Each time a product is used you can recall the PLU number which will set the indicator with the appropriate information.

***Note:*** *PLUs are programmed in SUPER PLU MODE, see page 155.*

### 3.6.1 Recalling a PLU

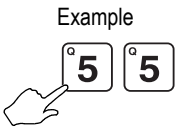
When you recall a PLU the indicator will be set to the required mode of operation. This may also recall the appropriate weighing application (see *Advanced Functions on page 35*).

There are three ways to recall a PLU / product:

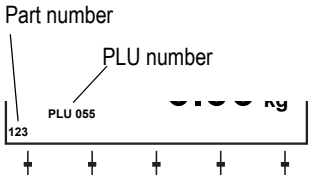
- recall by PLU number.
- recall by part number.
- press the ***PLU*** key and then the ***BROWSE*** soft key.

**Recall by PLU number**

**1.** Use the keypad to enter the reference number for the PLU.




**2.** Press ***PLU***.

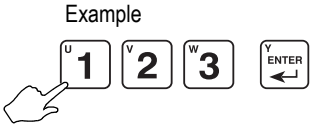


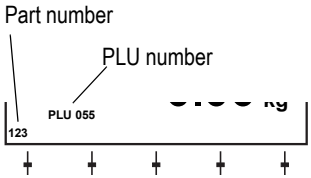

**3.** Press ***ENTER***.

### Recall by part number

1. Press ***PLU***.

2. Use the keypad to enter the part number for the product.




3. Press ***ENTER***.

***Note:*** *You will only get confirmation of the active PLU if the information line has been enabled. See INFO - Information line* *on page 148*.

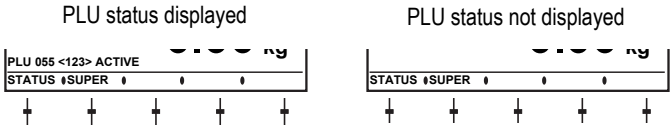
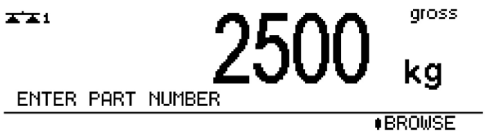


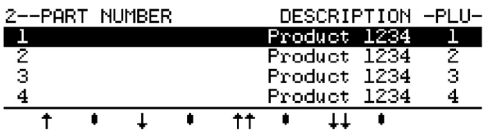

**Figure 3.1 Information line**

**Recall using PLU key and BROWSE soft key**

1. Press ***PLU*** to call up the PLU select screen.




2. Press the ***BROWSE*** soft key to call up the browser.




3. Use the up and down arrow keys to scroll through the PLU list. Press ***ENTER*** when desired PLU is highlighted.

## 3.6.2 PLU totals

The indicator will keep a running total of the weighing transactions for each PLU.

**When a PLU is active**

The indicator totals will be for the PLU.

**When there is no PLU active**

The indicator totals will be either:

- a generic total for all weighing transactions.

*OR*

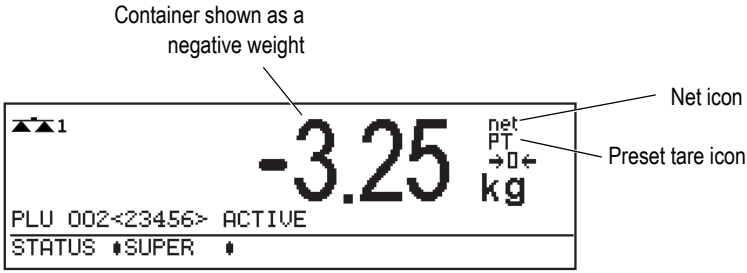
- a total for the weighing application in use.

For information on viewing and printing totals, see *Totals* *on page 27*.

### 3.6.3 Stored tares

Stored tares are a feature of PLUs, whereby a container weight is recalled as a tare when the PLU is activated.

When using a PLU with stored tare ensure that the container weight you are using is the same as the stored tare value.

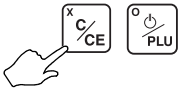


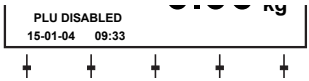

- Stored tares are programmed as part of the PLU in SUPER PLU MODE, see page 155.
- For more information on using tares, see *Tare / Net weighing on page 23*.

### 3.6.4 Cancelling an active PLU

**To cancel the active PLU:**

- Press ***C/CE***, then press ***PLU***.



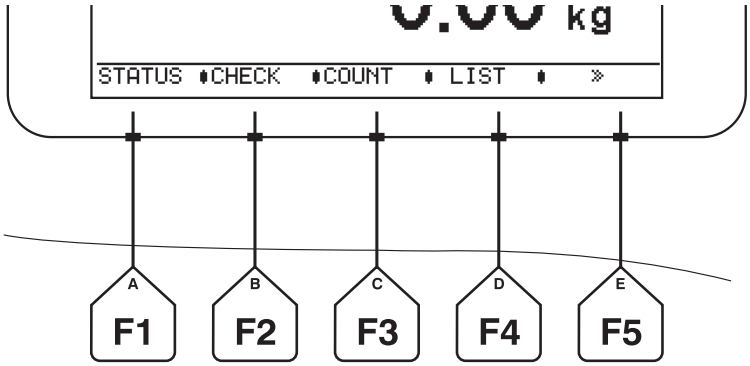

***Note:*** *The settings associated with PLUs are not always automatically cancelled. For example after you cancel a PLU a stored tare or other settings may still be active.*

# 4 Advanced Functions

There are a number of advanced weighing applications. Some or all of these may be available depending on its configuration.

## 4.1 Selecting the options

The options available are shown at the bottom of the display. You use the function keys (***F1 - F5***) to select them.




Example above:

**F1** = STATUS - Display indicator status
**F2** = CHECK - Select checkweigh mode
**F3** = COUNT - Select counting mode
**F4** = LIST - Select product listings
**F5** = >> View more options

### Full list of options

The full list of advanced applications is:

| Option | Description | See page |
|---|---|---|
| **STATUS** | Indicator status information | page 37 |
| **CHECK** | Checkweighing application | page 39 |
| **CONV** | Conversion mode | page 44 |
| **COUNT** | Counting application | *COUNT - Counting application* on page 75 |
| **LIST** | Product listing | page 47 |

| Option | Description | See page |
|---|---|---|
| **PACK** | Pack run application | page 51 |
| **PEAK_H** | Peak hold | page 58 |
| **RECIPE** | Recipe application | page 59 |
| **TYPE** | Type through mode | page 62 |
| **TRUCK** | Truck weighing application | *TRUCK - Weighbridge on page 91* |
| **MOTION** | In-motion weighing application | page 64 |
| **SUPER** | Supervisor mode. | *SUPER - Supervisor Mode on page 115* |

***Note:*** *Some options may not be available, depending upon indicator configuration.*

## Password protection

Some options may be password protected.

- **User password** - For access to the weighing applications
- **Super password** - For access to supervisor mode.

When prompted, enter the required password.

Default user password

To configure the passwords see page 126.

To configure access to indicator applications see page 133.

### Default passwords

- USER - ***1 1 1***
- SUPER - ***1 7 9 3***

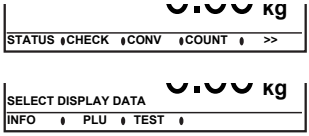
## 4.2 STATUS - Indicator status / test

Provides indicator status information and basic functional tests.

To access the STATUS option:

1. Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)
2. Press ***F1*** to select **STATUS** and view the available options.

Example displays




Use the ***'F'*** keys to select from the following options:

- ***INFO***. View system data.
- ***PLU***. View information about the active PLU. To activate a PLU see page 30.
- ***TEST***. Perform basic system tests.

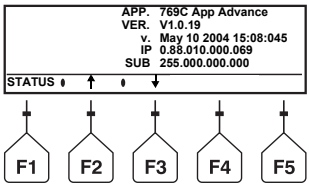
Press ***ESC*** to exit to operator mode.

### INFO - Viewing system data

This function enables you to view system and application information. Functions available with your indicator are also displayed.

- Press ***F2*** and ***F3*** to cycle through the information.
- Press ***F1*** to return to the STATUS menu.

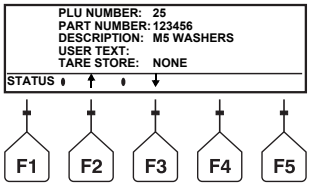
Press ***ESC*** to exit to operator mode.



### PLU - Viewing PLU data

You can display a list of parameters for an *active* PLU.

- Press ***F2*** and ***F3*** to cycle through the information.
- Press ***F1*** to return to the STATUS menu.

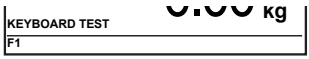



Press ***ESC*** to exit to operator mode.

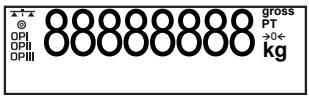
### TEST - Basic indicator tests

Use the function keys ***F1*** - ***F5*** to select:

- **KEYBRD**. Keyboard test mode.
  Press each key in turn.
  Press ***ESC*** to quit.




- **D_PLAY**. Initiates the display test. All legends are illuminated.




- **A2D TEST MODE**. For servicing diagnostic purposes. This displays the voltage from the A-D converter.
- **REM IO**. For servicing diagnostic purposes. This displays the status of the remote input / output interface (if fitted).
- **F BUS**. For servicing diagnostic purposes. This displays the status of any fieldbus interfaces that may be fitted.

Press ***ESC*** to exit to operator mode.

## 4.3 CHECK - Checkweighing

Only applicable for indicators with the checkweighing application enabled. Contact your Avery Weigh-Tronix centre for details.

Checkweighing is used to weigh goods to a target value. It uses a checkweigh bar to give a quick visual indication of an acceptable weight.

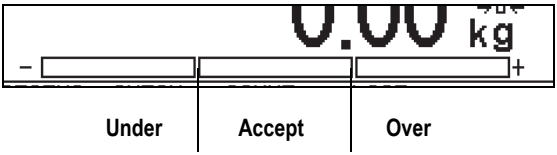



**Figure 4.1 Checkweigh bar**

Another display option shows the fill bars in full screen mode. See Figure 4.2.

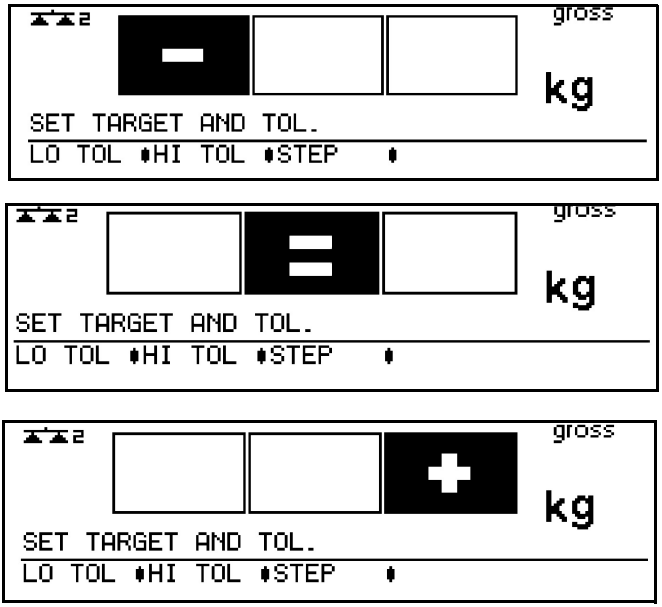


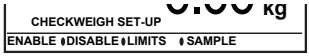

**Figure 4.2 Full screen mode for checkweighing**

**To enter CHECK mode:**

1. Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)

Example displays

2. Press ***F2*** to enter **CHECK** mode and view the available options.




3. Use the ***'F'*** keys to select from the following options:

- ***ENABLE***. Start checkweighing.
- ***DISABLE***. Stop checkweighing.
- ***LIMITS or TARGET***. Set up the checkweigh under, over and target values.
- ***SAMPLE***. Automatically set the high limit, low limit and step value by weighing the item.

## 4.3.1 Setting the checkweigh target

The way you set up checkweighing depends how your indicator was configured on installation.

You will use one of the following options:

- LIMITS. Program a maximum and minimum weight limit.

  Or

- TARGET. Program the target weight and specify the permitted tolerance above and below the target weight.

**LIMITS - Set up weight limits**

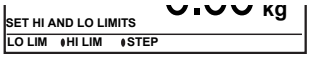
For indicators without this option, see TARGET on page 41.

Set the minimum and maximum permitted weights for the product.

1. Ensure the indicator is in **CHECK** mode, see page 40.

2. Press ***F3*** to select **LIMITS**.

3. Use the ***'F'*** keys to enter checkweighing limit data:

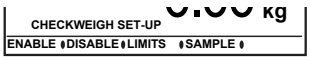



- ***F1* - LO LIM**. Enter the minimum target weight.
- ***F2* - HI LIM**. Enter the maximum target weight.
- ***F3* - STEP**. Set up the checkweigh bar step, see page 42.

**LIMITS - Sample an item**

If the indicator is set to LIMITS you can use the quick sample method instead of entering data for the high limit, low limit and step value.

1. Ensure the indicator is in **CHECK** mode, see page 40.




2. Place the item on the scale.
3. Press ***F4*** to select **SAMPLE**.

   High limit = weight + 1 division
   Low limit = weight - 1 division
   Step value = 1 division

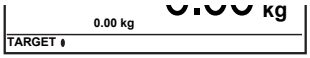
**TARGET - Set a target weight**

For indicators without this option, see LIMITS on page 40.

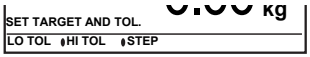
Program the target weight and the permitted upper and lower tolerances.

1. Ensure the indicator is in **CHECK** mode, see page 40.

2. Press ***F3*** to select **TARGET**.




3. Enter the target weight.
4. Use the ***'F'*** keys to enter checkweighing tolerance data:




- ***F1* - LO TOL**. Enter the acceptable tolerance below the target weight.
- ***F2* - HI TOL**. Enter the acceptable tolerance above the target weight.

- ***F3* - STEP**. Set up the checkweigh bar step, see page 42.

### 4.3.2 STEP - Checkweigh bars

The under and over checkweigh bars can be set to show a gradual increase or decrease in weight, in relation to the target.

The **STEP** value determines the graduation shown.

**Example**

For a STEP value of 100 kg:
The following checkweigh bar shows a weight approx 50kg below the target value.

***Note:*** *A value of 0 can be entered to turn off the step function. (The bars will appear as a solid block to indicate either under or over range).*

**Setting the STEP value.**

This can be set as part of:

- **LIMIT** option, see page 40.
- **TARGET** option, see page 41.

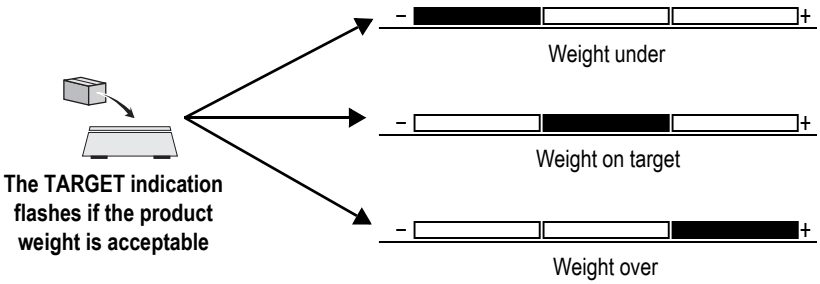
### 4.3.3 Using checkweigh

You will need to set the checkweigh target / limits before using checkweigh mode.

**Checkweighing procedure:**

1. Ensure the indicator is in **CHECK** mode, see page 40.
2. Press ***F1*** to ENABLE.
3. If required, place a container on the scale and tare. (*Tare / Net weighing on page 23*.)

**4.** Place goods on the scale and check the display.




### Exit CHECK mode

**5.** Ensure the indicator is in **CHECK** mode, see page 40.

**6.** Press ***F2*** to DISABLE.

**7.** Press ***ESC*** to return to normal weighing mode.

## 4.4 CONV - Conversion mode

Only applicable for indicators with the conversion application enabled. The converted value may be displayed and printed either as a whole number or with decimal places. Contact your Avery Weigh-Tronix centre for details.

This option allows you to apply a known conversion factor to the net weight on the scale.

Depending upon your configuration, the conversion mode will operate in one of 2 ways:

- Converted weight is displayed (and printed).

OR

- Converted weight is not displayed (printed only).

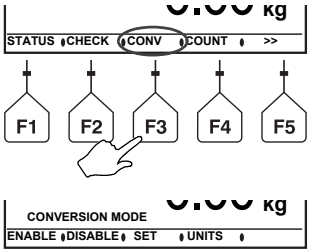
**To enter CONV mode:**

**1.** Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)

**2.** Press the appropriate ***F*** key to select **CONV.**

**3.** Use the ***'F'*** keys to select from the following options:

Example displays




- **ENABLE**. Enable conversion mode.
- **DISABLE**. Disable conversion mode.
- **SET**. Set the conversion factor.
- **UNITS**. Select the units to be displayed / printed. (See page 127 to configure the units available.)

## Setting the conversion factor

The net weight is multiplied by the conversion factor to give the converted weight.

### Conversion factor values

The converted weight will be either displayed, printed or both.

- Displayed converted weight. Enter a value of between 0.001 and 100.
- Printed converted weight. Enter a value of between 0.1 and 10.

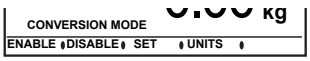
### Example

For an indicator weighing in kg:
Set the conversion factor for a liquid with a density of 0.8 kg/litre.

| To convert the weight in kg into the volume of liquid in litres. | |
|---|---|
| Density of liquid | = 0.8 kg/l |
| => Volume of liquid | = 1/0.8 |
| | =1.25 l/kg |
| **Therefore conversion factor = 1.25** | |

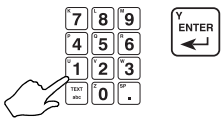
## Using CONV mode

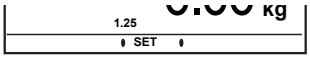
1. Ensure the indicator is in **CONV** mode, see page 44.




### Set conversion factor

2. Press ***F3*** to select **SET**.
3. Enter the required conversion factor.

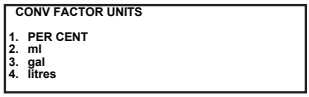


### Select units

**4.** Press ***F4*** to select **UNITS**.

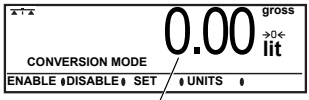
**5.** Use the keypad to select the required units from those available.




### Weigh using conversion

**6.** Press ***F1*** to **ENABLE** conversion mode.

**7.** Weigh the required products (see *Basic weighing* *on page 20*).



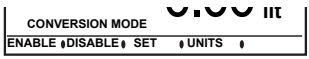

Example shows converted value displayed with decimal places

***Note:*** *Display may not b enabled for conversion, however converted units may still be printed.*

***Note:*** *You may use any of the weighing applications with CONV mode, except for COUNT.*

### Exit CONV mode

**8.** Ensure the indicator is in **CONV** mode, see page 44.




**9.** Press ***F2*** to DISABLE.

**10.** Press ***ESC*** to return to normal weighing mode.

## 4.5 LIST - Product listing

Only applicable for indicators with the product listing application enabled. Contact your Avery Weigh-Tronix centre for details.

The product listing is a ‘printing’ application.

It allows you to print a number of weighing transactions to a single ticket or receipt.

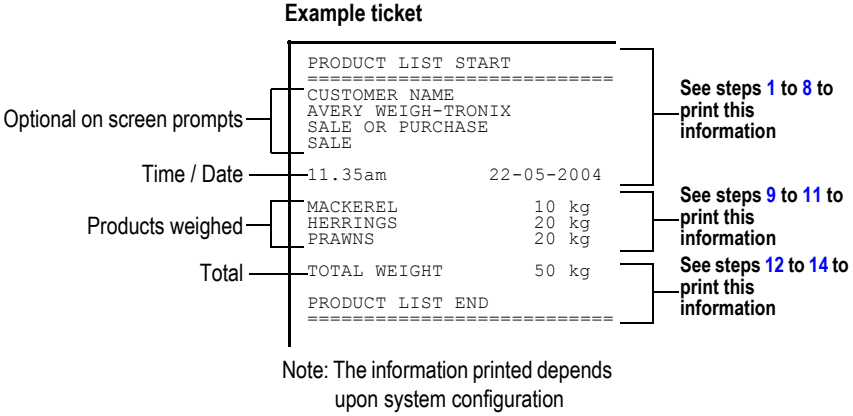
### Typical product list

To use product lists, your indicator will typically be configured with:

- Messages to be printed at the head and foot of the ticket. (Contact your Avery Weigh-Tronix centre.)
- On-screen prompts (user fields) to enter required information (for example, customer name and address). See *FIELDS - User fields* *on page 136*.
- Products / PLUs to be weighed. See *SUPER PLU MODE* *on page 155*.

These are then printed on the ticket as part of the product listing operation.

**Figure 4.3 Example product list ticket**

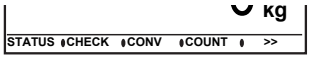



Note: The information printed depends upon system configuration

**To enter LIST mode:**

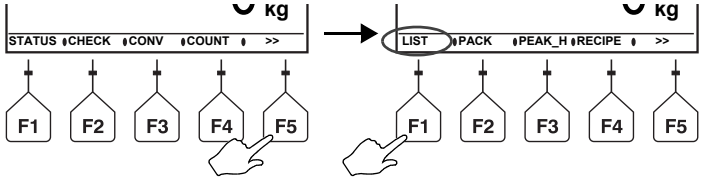
**1.** Ensure the indicator is in operator mode.
(Press ***ESC*** if necessary.)

Example displays




**2.** Press ***F5*** until the **LIST** option is displayed, then press the appropriate ***'F'*** key to select.

Example




**3.** Use the ***'F'*** keys to select from the following options:

- **START**. Start a new product listing.
- **END**. Complete the current product listing.
- **DISABLE**. Quit the product listing.

**Product list procedure**

The following is an example of a typical product listing.

**4.** Ensure the indicator is in **LIST** mode (see above).

**5.** Press ***F1*** to START.

**Enter user fields (on-screen prompts)**

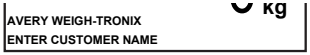
If there are no prompts to enter information, go to step 9.

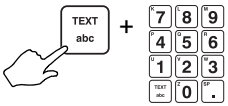
**6.** Type information following the on-screen prompts.

Use the keypad to enter text or numbers as required.

**= 1 2 3 4 5 .....**

Example




**= A B C D .....**

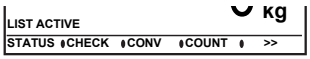
**7.** Press ***ENTER***.

**8.** Press the ***PRINT*** key when prompted.

*Repeat steps 6 to 8 for each user field as prompted.*

### Weigh products

**9.** Press ***ESC*** for weighing mode.




**10.** Weigh goods as required. (See *Basic weighing on page 20*.)

**11.** Press ***PRINT*** key.

*Repeat steps 9 to 11 for each product to be weighed.*

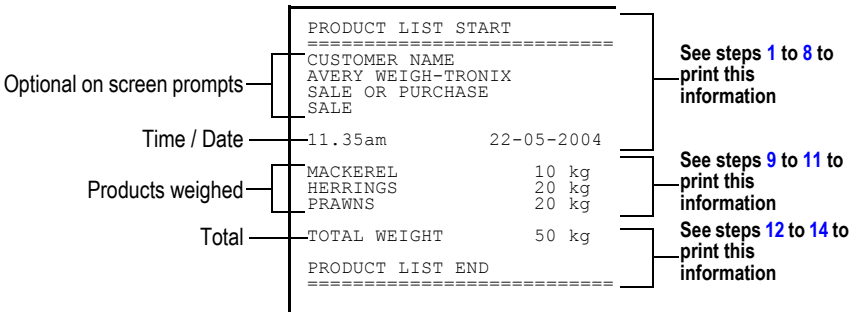
### Complete the list

**12.** Ensure the indicator is in **LIST** mode, see page 48.

**13.** Press ***F3*** to **END**.

**14.** Press the ***PRINT*** key.

**Example ticket**




Note: The information printed depends upon system configuration

**15.** Press ***ESC*** to return to normal weighing mode.

## List totals

The product listing uses the standard sub-total and grand total stores.

- **Sub-total**. Total for an individual list.
- **Grand total**. Cumulative total for all lists (and any other weighing transactions).

For information on viewing, printing and clearing these totals see *Totals* *on page 27*.

## 4.6 PACK - Pack runs

Only applicable for indicators with the pack run application enabled. Contact your Avery Weigh-Tronix centre for details.

In pack run mode, the indicator will weigh a batch of items to a target value.

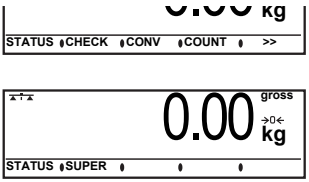
Each time the weight reaches the required target, the indicator updates totals and prints weight information to the connected printer (or other device).

For information on viewing / printing totals - see *Totals* *on page 27*.

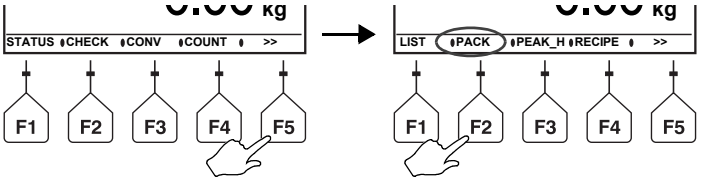
**To enter PACK mode:**

1. Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)
2. Check that the display reads zero. (Press the ***ZERO*** key if required.)
3. Press ***F5*** until the **PACK** option is displayed, then press the appropriate **'*F'*** key to select.

Example displays




Example




4. Use the **'*F'*** keys to select from the following options:

- ***ENABLE***. Start pack run.
- ***RESET***. Reset the pack count.
- ***END***. Stop pack run.
- **REPRINT**. Reprint the labels for the current pack run.
- **SETUP**. Set up the pack run.

### 4.6.1 Setting up the pack run

## LEVELS - Pack run levels

The pack run consists of up to 3 levels. The levels represent the physical packaging of the goods.

For example:

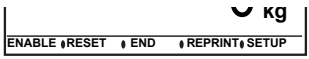
Level 1 = Quantity of packs in a carton

Level 2 = Quantity of cartons in a box

Level 3 = Quantity of boxes on a palette

The indicator prints the labels for each level of packaging. For example, each pack, carton, box and palette will have a label.

1. Ensure the indicator is in **PACK** mode, see page 51.



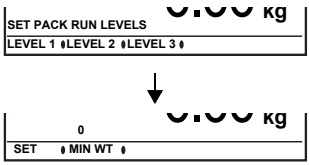

2. Press ***F5*** to select **SETUP**.
3. Press ***F1*** to select **LEVELS**.

**Level 1 set up**

**SET the pack run size**

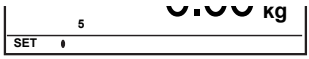
Set the quantity for level 1 packaging, for example the number of packs in a carton.

4. Press ***F1*** to select **LEVEL 1**.




5. Press ***F1*** to select **SET**.
6. Enter the number of items in the level 1 batch.

Example



Enter a number in the range 0 to 1000.
Enter 0 for an indefinite pack run size (no further levels required).

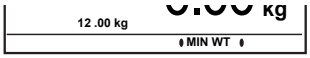
**Set the minimum weight (MIN WT)**

Set the minimum weight for each pack to be weighed.

**7.** Press ***F2*** to select **MIN WT**.

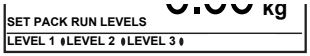
**8.** Enter the minimum acceptable weight for items in the pack run.

Example




***Note:*** *The MIN WT is only used when the target type is set to WEIGHT (see page 54). As the minimum weight applies to all levels you only need to set it up once for level 1.*

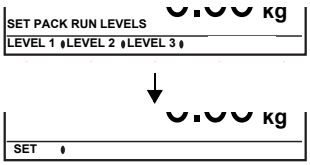
**9.** Press ***ENTER***.




**Level 2 and 3 set up**

Set the quantity for level 2 and 3 packaging.

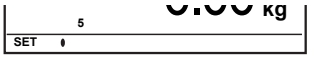
**10.** Press ***F2*** or ***F3*** to select LEVEL 2 or 3 as required.




**11.** Press ***F1*** to select **SET**.

**12.** Enter the number of items in the level 2 or 3 batch.

Example




***Note:*** *If level 2 or 3 packaging is not required, set the quantity to 0.*

**13.** Press ***ENTER***.

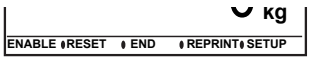
## SELECT - Target type

The target for each pack can be any of the following:

- Weight.
  Each pack must meet the minimum weight set for level 1. All levels use the same minimum weight.
- Checkweigh target.
  Each pack weight must be within the checkweigh accept band. See page 39 for an explanation of checkweighing.

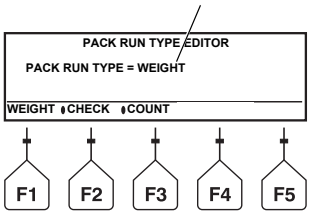
  **or**
- Count.
  Each pack must contain a specified number of items. See page 75 for an explanation of counting.

### To set the target type




1. Ensure the indicator is in **PACK** mode, see page 51.
2. Press ***F5*** - **SETUP**.
3. Press ***F2*** - **SELECT**.
4. Press ***F1*** - **TYPE**.
5. Use the ***F*** keys to select either:
   **WEIGHT**
   **CHECK** or
   **COUNT**

Example shows weight target type




6. Press ***ENTER*** to confirm selection of the displayed target type.

### To set type parameters

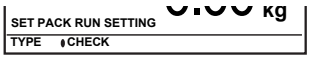
**If Type = WEIGHT:**

The target weight for all levels is set to the minimum weight specified for level 1, see page 52.

**If Type = CHECK:**

For check target types you must set up the checkweigh parameters.

1. Press ***F2*** - **CHECK**.
2. Use the ***F*** keys to set the required parameters.



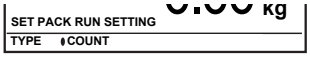

For more information on checkweigh set up see page 39.

***Note:*** *The checkweigh target overrides any minimum weight associated with level 1.*

**If Type = COUNT:**

For count target types you must set up the count parameters.

1. Press ***F2*** - **COUNT**.
2. Use the ***F*** keys to set the required parameters.




For more information on count set up see page 75.

***Note:*** *The count target overrides any minimum weight associated with level 1.*

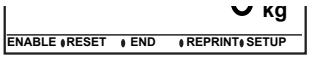
### 4.6.2 Using the pack run

Once the pack run is set up you can proceed with the pack run itself.

## Pack run procedure

The following is an example of a typical pack run.

1. Ensure the indicator is in **PACK** mode, see page 51.

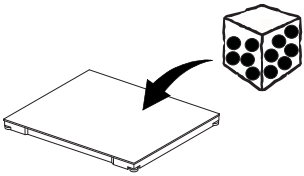



**ENABLE the pack run**

2. Press ***F1*** to select **ENABLE**.

### Using a pack run

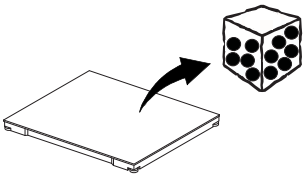
**3.** Place the goods on the scale.



The indicator will:

Increment the pack run.
Update the totals store.
Print the required pack label.

**4.** Remove the goods from the scale.



**5.** Repeat steps 3 and 4 until the pack run is complete.

**6.** Press ***ENTER*** to start the next pack run.

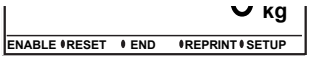
***Note:*** *The scale displays only the level 1 count; labels are printed for level 2 and 3 packaging at the appropriate intervals.*

***Note:*** *Before weighing into a container, place the empty container onto the scale and press TARE.*

## Disabling the pack run

The indicator will remain in pack run mode until you select the **END** option.

1. Ensure the indicator is in **PACK** mode, see page 51.




2. Press ***F3*** to end the pack run.

3. Press ***ESC*** to return to normal weighing mode.

## 4.7 PEAK_H - Peak hold

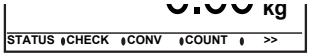
Only applicable for indicators with the peak hold application enabled. Contact your Avery Weigh-Tronix centre for details.

The peak hold stores the peak weighed value.

**To view / print the peak value:**

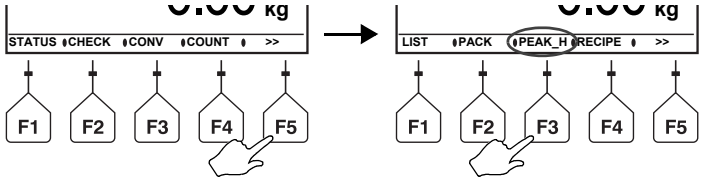
1. Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)

Example displays




2. Press ***F5*** until the **PEAK_H** option is displayed, then press the appropriate ***F*** key to select.

Example




3. Use the ***'F'*** keys to select from the following options:

- ***CLEAR***. Clear the peak hold value.
- ***VIEW***. View the peak hold value.
- ***PRINT***. Print peak hold value to a printer (or other connected device).

Press ***ESC*** to exit to operator mode.

## 4.8 RECIPE - Run or edit a recipe sequence

Only applicable for indicators with the recipe application enabled. Contact your Avery Weigh-Tronix centre for details.

The recipe application enables you to run a recipe program configured in supervisor mode.

The recipe is used to control various devices connected to the indicator. Typical devices include conveyors, hoppers and other equipment to control the flow/movement of goods into containers.

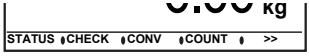
In addition to the measured weight, the devices are also controlled by the status of the indicator's inputs.

Whilst the recipe is running the display will show information describing the progress made.

**To enter RECIPE mode:**

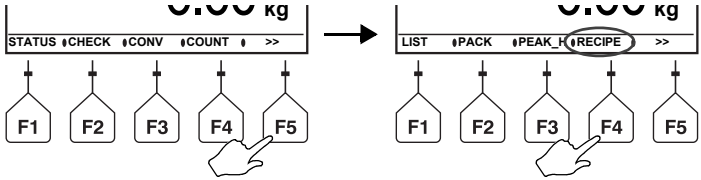
**1.** Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)

Example displays




**2.** Press ***F5*** until the **RECIPE** option is displayed, then press the appropriate ***F*** key to select.

Example




**3.** Use the **'*F*'** keys to select from the following options:

- ***SELECT***. Select a recipe to run or to edit.
- ***START***. Start the selected recipe.
- ***EDIT***. Change a recipe.

**The recipe sequence:**

The recipe is a sequence of steps pre-programmed in supervisor mode (see *RECIPE programming* *on page 181*). Each step has a particular set of rules and operations. For example, the indicator will activate a particular set of outputs at a particular target weight.

- ***ABORT.*** Press ***F1*** at any time to abort the recipe sequence.

Press ***ESC*** to exit to operator mode.

**To edit a recipe:**

There are three different modes for a recipe:

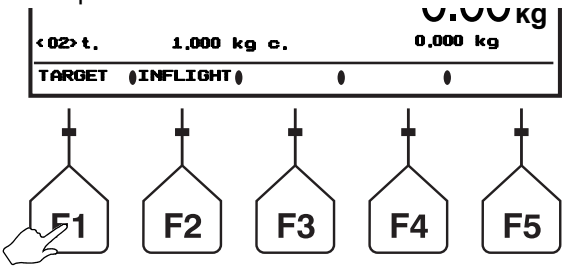
- ***R*** allows no change.
- ***RW*** allows temporary changes.
- ***RW+*** allows permanent changes.

To edit a recipe do these steps:

1. Make sure you are in RECIPE mode and that the chosen recipe is editable.
2. Press **F1 - EDIT**.
3. The **F2** and **F3** keys scroll through the list of editable weight based ingredients
4. Use the '**F**' keys to select from the following options :

- **TARGET**. Change the target weight.
- **INFLIGHT**. Change the in-flight compensation value.

Example:



**5.** Use the keypad to enter the value you want.

**6.** Press **ENTER**.


***Note:*** *The **EDIT** soft key is not displayed while a recipe is active.*

### 4.8.1 Recipe Batching

Recipe Batching is enabled in Service Setup mode. Contact your Avery Weigh-Tronix centre for details.

Recipe Batching allows a recipe to be repeated multiple times. The indicator allows for a recipe batch start and end string to be configured and printed. The indicator also maintains totals information for the batch.

## 4.9 ALARM - Edit alarms

***Note:*** *This function is only applicable for indicators if alarms are programmed.*

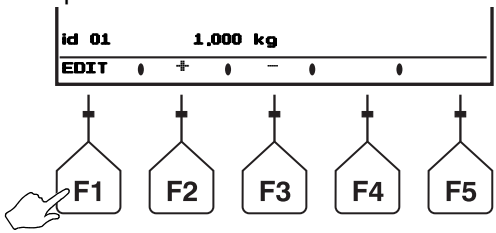
**To enter ALARM mode:**

1. Make sure the indicator is in operator mode.
   (If necessary, Press ESC.)
2. Press **F5** until the **ALARM** option is displayed, then press the appropriate **F** key to select.

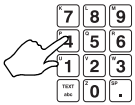
**To edit an ALARM:**

1. Press **F2** and **F3** to scroll through the list of weight- based alarms.

Example:




2. When the chosen alarm is displayed, press **F1 - EDIT**.
3. Enter with the Keyboard the target weight you want.



4. Press **Enter**.

## 4.10 TYPE - Type through mode

Your indicator may have a printer connected or another device for reporting / storing the weight data.

The TYPE option allows you to enter lines of text to be sent to the printer. It can be used to add supplementary notes to a printed ticket following a weighing operation.

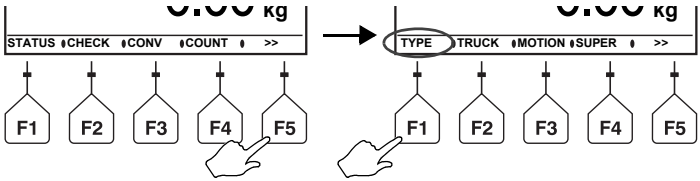
**To enter TYPE mode:**

**1.** Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)

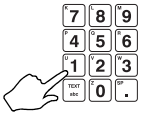
Example displays

**2.** Press ***F5*** until the **TYPE** option is displayed, then press the appropriate ***F*** key to select.

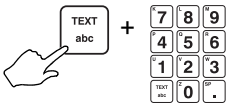
Example




**3.** Use the keypad to enter text or numbers as required.



**= 1 2 3 4 5 .....**




**= A B C D .....**

**4.** Press ***ENTER*** to print the line of text.

**5.** Press ***ESC*** when finished.

## 4.11 MOTION - In motion weighing

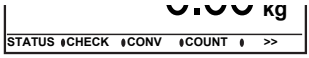
Only applicable for indicators with the in-motion application enabled. Contact your Avery Weigh-Tronix centre for details.

In motion weighing is used to weigh goods as they move, for example when travelling on a conveyor belt.

**To select the MOTION function:**

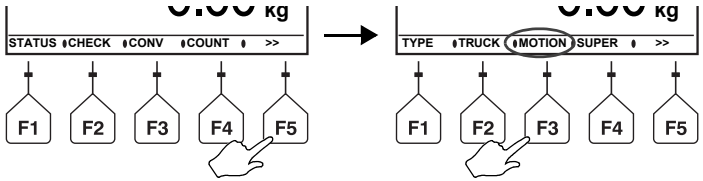
**1.** Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)

Example displays




**2.** Press ***F5*** until the **MOTION** option is displayed, then press the appropriate ***F*** key to select.

Example




**3.** Use the ***'F'*** keys to select from the following options:

- ***MOT ON***. Start in motion weighing.
- ***M OFF***. Stop in motion weighing.
- ***R CTR***. Reset the transaction counter.

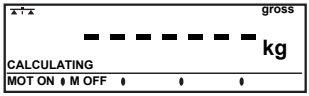
Press ***ESC*** to exit to operator mode.

**Motion weighing sequence**

The motion weighing sequence progresses as the goods pass two sensors:

**1.** Press ***F1*** to initiate the sequence.

**2.** **Start**. The goods pass the start sensor to initiate the weighing operation.




**3.** **Finish**. The goods pass the end sensor to finish the weighing sequence.
- The weight is displayed for 3 seconds.
- The transaction counter is updated.

## 4.12 CYLF - Cylinder filling

Only applicable for indicators with the cylinder filling (**cylf**) application enabled. Contact your Avery Weigh-Tronix centre for details.

The cylinder filling operation is programmed in PLUs and is not a separate function selected using the ***F*** keys. Depending on configuration, the indicator may be set to either single fuel or dual fuel bottle filling or to checkweighing gas bottles.

Entering a tare (empty bottle weight) starts the filling sequence. Each time the fill weight reaches the required target, the indicator updates and prints weight information to the connected printer (or other device). If the PLU is programmed with alternate units you can enter the tare weight of the bottle in decimal pounds.

For information on viewing / printing totals - see *Totals on page 27*.

### Filling bottles

1. Ensure the scale is empty.
2. Check that the display reads zero. Press the ***ZERO*** key if required.

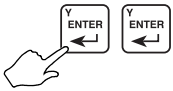
Example displays

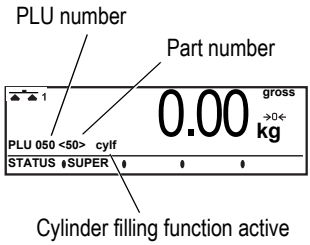
3. Press ***PLU***.

4. Use the keypad to enter the reference number for the PLU.

Example

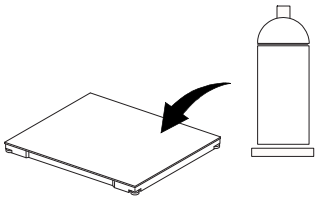
**5.** Press ***ENTER*** twice.

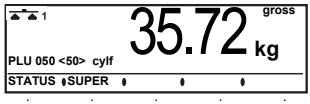



***Note:*** *The information line displays details of the selected PLU. (Info must be set to Yes in super mode).*

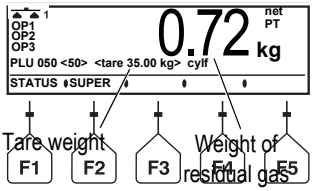
**6.** Place the empty gas bottle on the scale.






**7.** Use the keypad to enter the tare weight of the bottle.

Example: 35 kg, 4 digit, fast entry tare

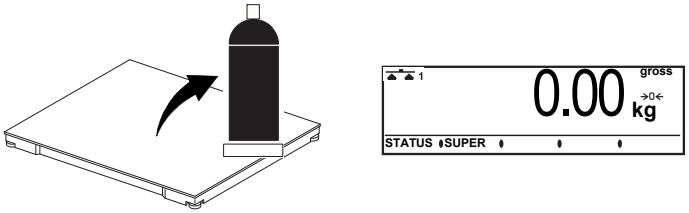



***Note:*** *Remember to enter the correct number of digits (2 to 5) in the correct format for the tare to start the filling sequence. The indicator completes the initial bottle fill and commences pulse dosing to bring the bottle fill up to the target weight. The filling sequence is complete when the flashing gas bottle symbol appears on the display.*

***Note:*** *The number of tare digits to be entered is configured in SUPER PLU MODE.*

Example: compensation weight 1.20 kg, target net fill 50.00 kg

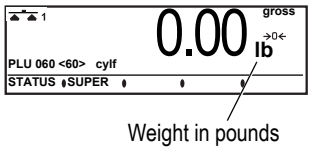
**8.** Remove the full gas bottle from the scale.



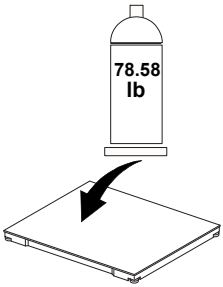

***Note:*** *When you remove the full bottle the tare self cancels, the scale shows zeroes ready for the next bottle and the bottle symbol disappears. If the gas bottle symbol is still flashing when the next bottle is placed on the scale press* ***ESC*** *to reset the sequence.*

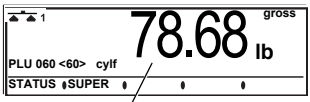
### Alternate units

The PLU may be programmed with different units for weighing and entering the tare weight. When you select the PLU the weight display shows decimal pounds, for example, enabling you to enter the weight of the empty bottle on the scale.



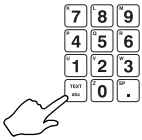

Weight in pounds

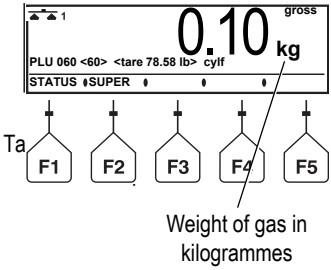



Weight of bottle and residual gas in decimal pounds

**enter tare weight**




Weight of gas in kilogrammes

***Note:*** *When you enter the tare weight in pounds the cylinder is always filled in kilogrammes.*

## Check weighing bottles

Checkweighing operations must be performed on a dedicated machine.

**1.** Ensure the scale is empty.

**2.** Check that the display reads zero. Press the ***ZERO*** key if required.

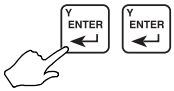
Example displays

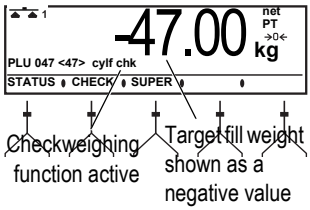
**3.** Press ***PLU***.

**4.** Use the keypad to enter the reference number for the PLU.

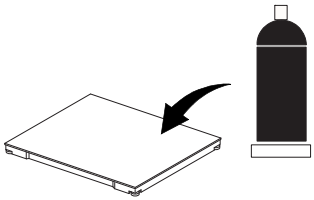
Example

**5.** Press ***ENTER*** twice.




**6.** Place the filled bottle on the scale.

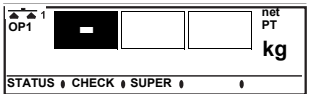


**7.** Use the keypad to enter the tare weight of the bottle.

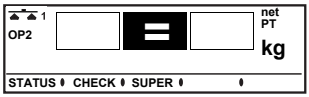
Example: 35 kg, 4 digit, fast entry tare

***Note:*** *Remember to enter the correct number of digits in the correct format for the tare to start the checkweighing operation. Depending on the accept band programmed in the PLU, the indicator then displays an under fill as a minus box, a target fill as an equals box and an over fill as a plus box.*

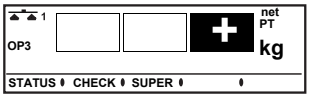
**Under fill**



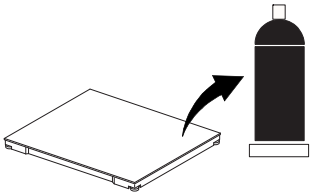

**Target fill**




**Over fill**

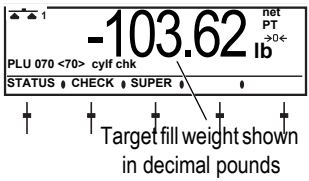



**8.** Remove the gas bottle from the scale.



**Alternate units**

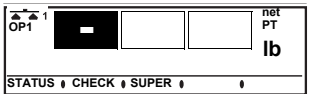
A PLU can be programmed with different units for weighing and tare entry, for example when checking old gas bottles. When you select the PLU the target fill weight programmed in kilogrammes is displayed as a negative value in decimal pounds.



Place the bottle on the scale.
Enter the tare weight of the bottle in decimal pounds.

Example: 39.99 lb, 4 digit, fast entry tare

**Under fill**



## 4.13 OFFLINE - Stored print transactions

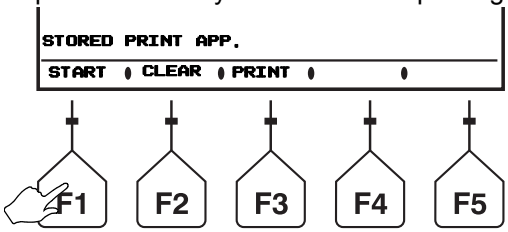
***Note:*** *This option is only applicable with the expanded memory option board fitted and the stored print option enabled.*

**To enter OFFLINE mode:**

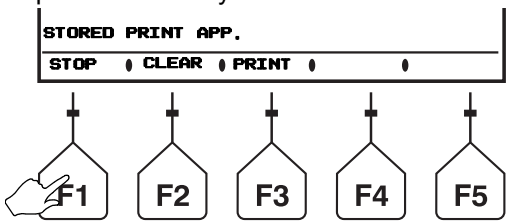
1. Make sure the indicator is in operator mode. (If necessary, Press **ESC**.)
2. Press **F5** until the **OFFLINE** option is displayed, then press the appropriate '**F**' key to select.

**To store transactions in manual mode:**

1. Press **F1 - START** to start storing transactions on the expanded memory card instead of printing them.




2. Press **F1 - STOP** to stop storing transactions on the expanded memory card.




***Note:*** *If the indicator is storing print transactions but there is no more space then this error message is displayed: EXP.MEMORY.FULL.*

**To store transactions in AUTOMATIC mode:**

***Note:*** *In this mode the indication detects if the print transaction has failed then it will automatically store the transactions on the external memory card. A message will be displayed to say that the print failed.*

***Note:*** *If the indicator is storing print transactions but there is no more space then this error message is displayed: EXP.MEMORY.FULL.*

**To delete stored transactions:**

1. Make sure the indicator is in **OFFLINE** menu.
2. Press **F2 - CLEAR**
3. Press **F1 - YES**.

**To print stored transactions:**

1. Make sure the indicator is in **OFFLINE** menu.
2. Press **F3 - PRINT**.

# 5 COUNT - Counting application

Only applicable for indicators with the counting application enabled. Contact your Avery Weigh-Tronix centre for details.

## 5.1 Introduction

The counting application takes the known weight of an item (the piece weight) and uses this to count the number of pieces in a batch.

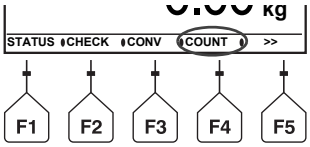
There are four steps to the counting function:

1. Enter count mode.
2. Determine the piece weight (see page 76).
3. Count the required items.
4. Exit to operator mode when finished (***ESC*** key).

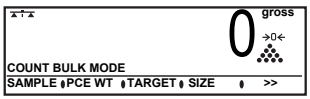
**To enter COUNT mode:**

1. Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)
2. Press the appropriate ***F*** key to select **COUNT.**
3. Use the **'*F*'** keys to select from the following options:

Example displays




- **SAMPLE**. Sample a batch of items (to determine the piece weight).
- **PCE WT**. Enter a known piece weight.
- **TARGET**. Enter a target count value.
- **SIZE**. Size of sample for bulk and dribble sampling (page 82).
- **BULK**. Select bulk sample mode (see page 82).
- **DRIBBLE**. Select dribble sample mode (see page 79).



## 5.2 Setting the piece weight

The piece weight is the weight of a single item.

By weighing a batch of items and dividing by the piece weight, the indicator determines how many items there are.

**Example**

Piece Weight = 20 kg

Weight of batch = 200 kg

(200 / 20)= Items in batch = 10

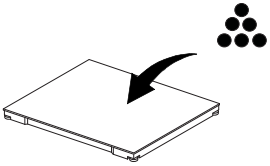
You can determine the piece weight using any of the following methods:

- Fast sampling. General quick process. See page 77.
- Dribble sampling. Small items in containers, for example nuts and washers. See page 79.
- Bulk sampling. Large items for shipping. See page 82.
- Keyboard entry. For items of a known piece weight. See page 85.

### 5.2.1 Fast sampling

1. Ensure the indicator is in **COUNT** mode (see page 75).

2. Press ***ZERO*** to zero the scale.
3. Place the sample on the scale.

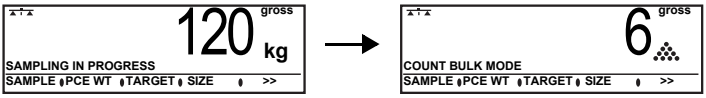


***Note:*** *The display uses the piece weight from any previous counting operation, or the default value of 1 kg.*

4. Enter the number of items in the sample.

Example

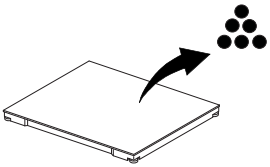
5. Press ***F1*** to select **SAMPLE**.
The indicator will calculate the piece weight.




Weight of sampled items

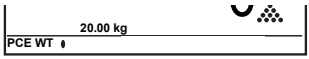
Number of items sampled

6. Remove the sample from the scale.



Count returns to zero

7. To view the piece weight press ***F2***.




8. Count the required batches of items, see page 87.

## 5.3 Dribble sampling

This is the standard method of sampling and is suitable for sampling small components such as nuts and washers.

For a typical dribble sample you can determine the piece weight by either:

- Removing a sample quantity of items from a full container.

  *OR*

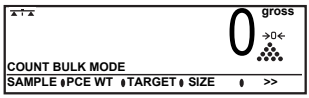
- Adding a sample quantity of items to a container.

***Note:*** *If the indicator is configured for retained tare you can use the TARE key to tare off the weight of a container. If the indicator is configured for cancelling tare you must use a keyboard entered tare.*

### 5.3.1 Dribble sample procedure

**Tare off the empty container**

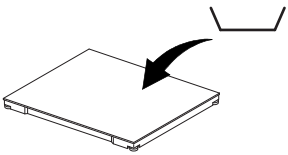
1. Ensure the indicator is in **COUNT** mode (see page 75).
2. Press ***ZERO*** to zero the scale.

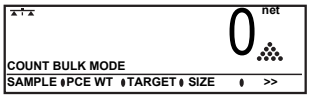



3. **Either**

   ***Indicator configured for retained tare***

   Place an empty container on the scale and press ***TARE***.



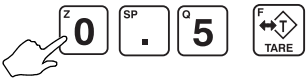



**Or**

***Indicator configured for cancelling tare***

Use the keypad to enter the weight of the container.

Example

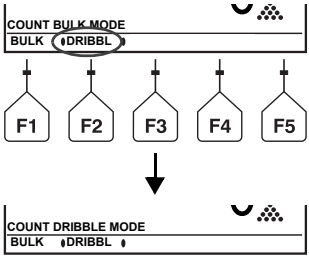



**Select DRIBBLE**

(If 'COUNT DRIBBLE MODE' is already displayed, go to step 7.)

**4.** Press ***F5*** to display the **DRIBBL** function.

**5.** Then press ***F2*** to select it.



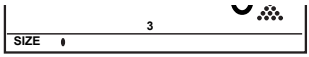

**Set the sample SIZE**

**6.** Press ***F5*** to display more functions.

**7.** Press ***F4*** to select the **SIZE** function.

**8.** Enter the number of items for the sample.

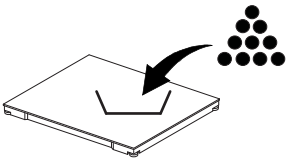
Example




**9.** Press ***ENTER***.

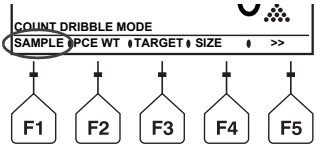
**Sample items**

**10.** Place the container of components onto the scale.

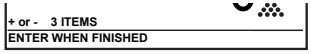


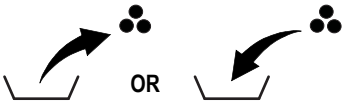
(Or use an empty container)

**11.** Press ***F1*** to select **SAMPLE**.

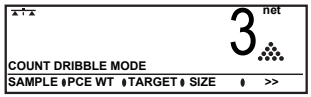



**12.** Add or remove the required sample quantity from the container. Then press ***ENTER***.



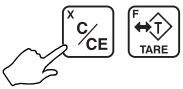




*The display shows the count of items in the container.*




**13.** Count the required batches of items.

**14.** If using a keyboard entered tare clear the tare.



## 5.4 Bulk sampling

This method is suitable for sampling larger items which are packed into a box for transportation. For a typical bulk sample you can determine the piece weight by either:

- Removing a sample quantity of items from a full container.

  OR

- Adding a sample quantity of items to a container.

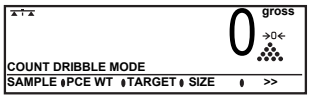
***Note:*** *You must add / remove all the samples from the scale at the same time.*

***Note:*** *If the indicator is configured for retained tare you can use the TARE key to tare off the weight of a container. If the indicator is configured for cancelling tare you must use a keyboard entered tare.*

### 5.4.1 Bulk sample procedure

**Tare off the empty container**

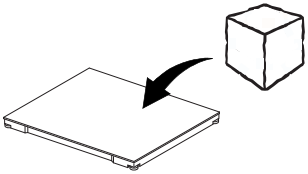
1. Ensure the indicator is in **COUNT** mode (see page 75).

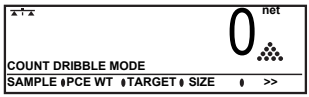



2. Press ***ZERO*** to zero the scale.
3. **Either**

   ***Indicator configured for retained tare***

   Place an empty container on the scale and press ***TARE***.

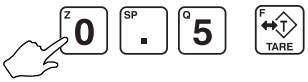




**Or**

***Indicator configured for cancelling tare***
Use the keypad to enter the weight of the container.

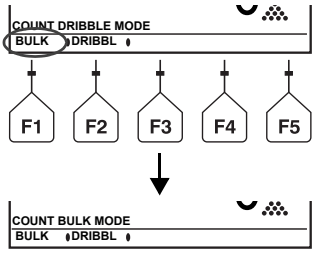
Example




**Select BULK**
(If 'COUNT BULK MODE' is already displayed, go to step 7.)

**4.** Press ***F5*** to display the **BULK** function.

**5.** Then press ***F1*** to select it.



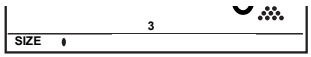

**Set the sample SIZE**

**6.** Press ***F5*** to display more functions.

**7.** Press ***F4*** to select the **SIZE** function.

**8.** Enter the number of items for the sample.

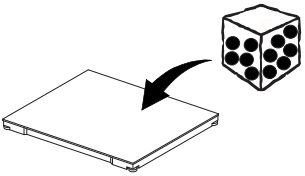
Example




**9.** Press ***ENTER***.

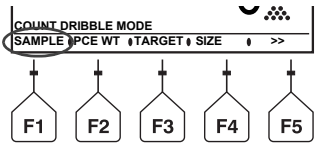
**Sample items**

**10.** Place the container of goods onto the scale.



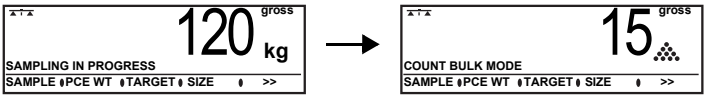
(Or use an empty container)

**11.** Press ***F1*** to select **SAMPLE**.




**12.** Add or remove the samples from the container **in one go**.

Example

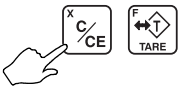



*The indicator takes the sample weight automatically when the weight on the scale becomes steady.*

*The display shows the count of items in the container.*

**13.** Count the required batches of items.

**14.** If using a keyboard entered tare clear the tare.

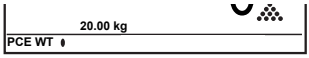


## 5.5 Entering the piece weight

You can enter the piece weight (if known) using the number pad. This saves you from having to perform a sample operation.

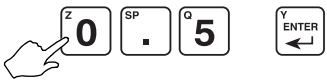
1. Ensure the indicator is in **COUNT** mode (see page 75).

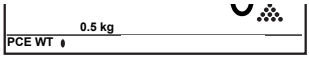
2. Press ***F2*** to select the function **PCE WT**.




3. Enter the piece weight and press ***ENTER***.

Example




**Piece weight notes**

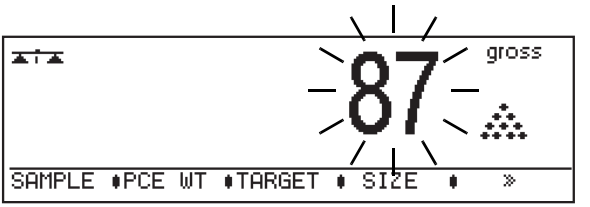
Please note the following when entering a piece weight:

- weight must be less than the scale capacity.
- weight must be greater than $^{1}/_{20}$th of an indicator increment.

## 5.6 Entering a count target

To assist you when counting you can enter a target for the count.

The count value and count symbol flash when you reach the specified number of items.

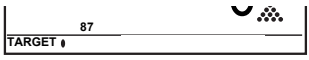



**To enter a count target:**

1. Ensure the indicator is in **COUNT** mode (see page 75).

2. Press ***F3*** to select the function **TARGET**.
3. Type the target count and press ***ENTER***.

Example



## 5.7 Counting

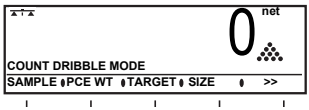
***Note:*** *Before counting you must set the piece weight value as described from page 76 onwards.*

You can count items in one of 2 ways:

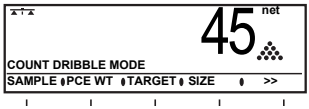
- Reverse counting. The indicator will count the number of items removed from a container.
- Forward counting. The indicator will count the number of items on the scale.

### Reverse counting

1. Set up the piece weight as described from *page 76* onwards.
2. Place the full container on the scale.
3. Press ***TARE*** to zero the count.




4. Remove items as required.




*The indicator counts the items as they are removed.*

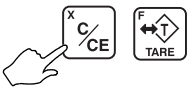
5. Repeat steps 3 - 4 to count batches of items from the container.

***Note:*** *The indicator can be configured to display negative counts when performing reversed counting. Contact your Avery Weigh-Tronix centre.*

## Forward counting

1. Set up the piece weight as described from *page 76* onwards.
2. If counting into a container tare off the container weight either by using the TARE key (retained tare configured) or a keyboard entered tare (cancelling tare configured).
3. Place items to be counted on the scale (in the container if appropriate).

4. Take the count reading.
5. Repeat steps 3 - 4 for each batch of items.
6. If using a keyboard entered tare clear the tare.



## 5.8 Counting using PLUs

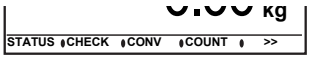
Your indicator may be programmed with PLUs which are preset for counting operations.

PLUs for counting operations are programmed in supervisor mode, see *SUPER PLU MODE* *on page 155*.

**To select a PLU:**

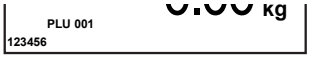
1. Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)

Example displays




2. Press the keys for the required PLU number, followed by the ***PLU*** key.

Example




3. Press ***ENTER*** to confirm selection.

### Counting PLU restrictions

A counting PLU may restrict the counting operation. Some or all of the following options may be preset or disabled.

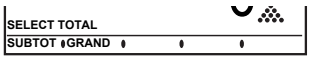
- COUNT BY PCE WT
- COUNT BY SAMPLE
- SET COUNT TARGET
- SAMPLE MODE
- DERIVE PIECE WEIGHT

## Counting totals

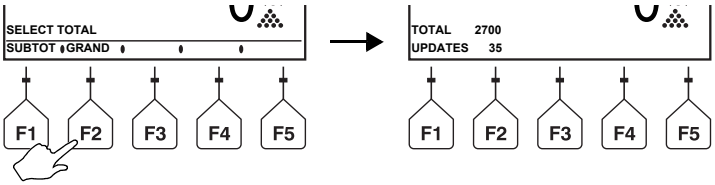
Count totals are kept for counting PLUs.

### Displaying totals / Sub totals

1. Select the appropriate PLU (page 89).
2. Press the ***TOTAL*** key.




3. Press ***F1*** or ***F2*** to select sub or grand totals.

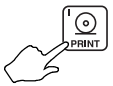



### Print / Clear totals

(Continued from above)

**CAUTION:** The totals are automatically cleared after printing.

4. With the totals displayed, press the ***PRINT*** key.



5. If prompted enter the appropriate password.

Default user password

6. Press ***ESC*** to return to counting operations.

# 6 TRUCK - Weighbridge

Only applicable for indicators with the Truck (Weighbridge) application enabled. Contact your Avery Weigh-Tronix centre for details.

## 6.1 Introduction

The weighbridge application enables the indicator to calculate the net weight of goods on a vehicle.

Typically you use this application to record:

- Weight of goods loaded onto a vehicle.

  *OR*

- Weight of goods unloaded from a vehicle.

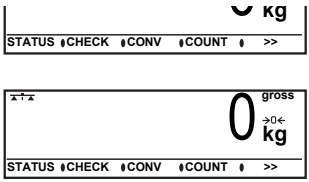
**To enter TRUCK mode:**

**1.** Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)

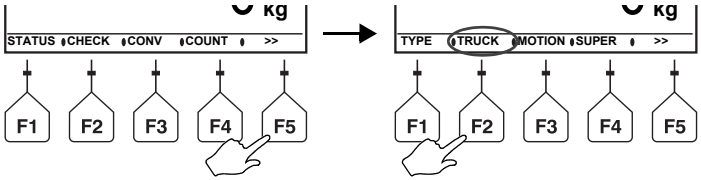
**2.** Check that the display reads zero. (Press the ***ZERO*** key if required.)

**3.** Press ***F5*** until the **TRUCK** option is displayed, then press the appropriate ***'F'*** key to select.

Example displays




Example




**4.** Use the ***'F'*** keys to select from the following options:

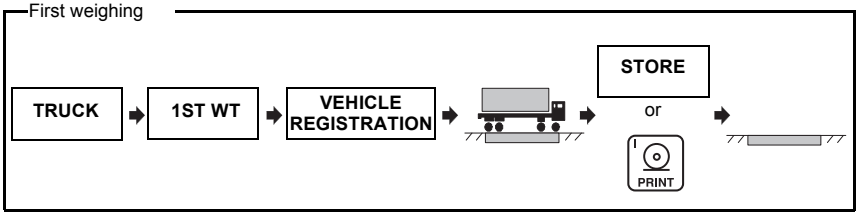
- ***1ST WT***. 1st vehicle weighing.
- ***2ND WT***. 2nd vehicle weighing.

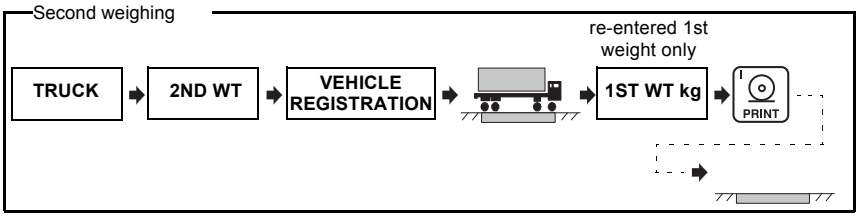
- **RET WT**. Vehicle tare weights.
- **AXLE**. Axle weighing.
- **PUBLIC**. Public weighbridge mode.

## Weighing sequences

When weighing the vehicles you will generally use either:

- **Single stage weighing**. Weigh the filled vehicle to determine the gross weight and use a known container or vehicle weight (**RET WT** vehicle record) to calculate the net weight. See page 103 for information on vehicle records.
- **2 stage weighing**. Take two weighings, one weighing when the vehicle is empty and one weighing when filled.
- **Multi-stage weighing (Multiple first weights)**. For vehicles whose load consists of a number of distinct portions. For example when weighing the cement, sand and gravel into a concrete mixing truck.




## Printing tickets

You can record the 1st and 2nd weight readings from a weighbridge and send the information to a suitable printer.

The information shown will depend upon system configuration, but may include:

- vehicle ID
- date and time
- consecutive number for each weighing
- calculated net weight.

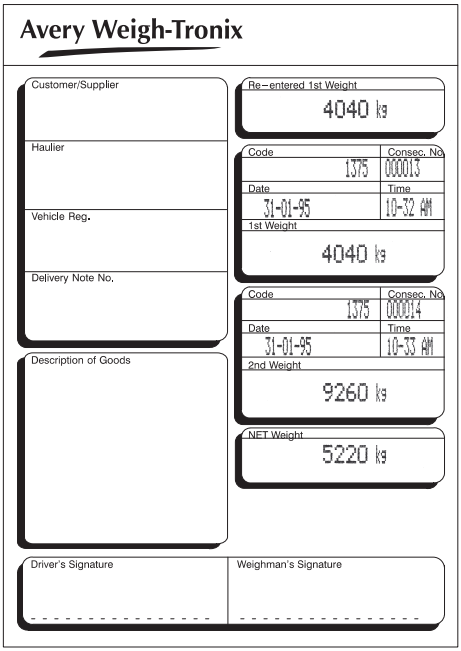



**Figure 6.1 Typical weigh ticket**

## Combined weight / Long vehicles

Only applicable for indicators with the combined weight option. Contact your Avery Weigh-Tronix centre for details.

You can view a combined weight of 2 weighbridge platforms. Used for example where 2 weighbridge platforms are linked together for weighing very long vehicles.

- Press the ***SCALE*** key to show the combined scale icon. The weight displayed is now the total for the combined weighbridge.

## 6.2 Single stage weighing

Single stage weighings are used with trucks for which a vehicle record is held, see page 103.

The empty (tare) weight of the vehicle is held in the vehicle record. By weighing the filled vehicle, the weight of the goods on-board can be calculated.

### Typical single stage weighing procedure

Follow the on-screen prompts and enter the information requested.

The following is an example of a typical weighing sequence. The actual steps required depend how your indicator is configured.

**1.** Ensure indicator reads zero **before** the truck drives onto the weighbridge. Press ***ZERO*** if required.

**2.** Vehicle drives onto weighbridge.

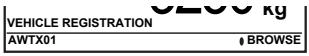
**3.** Ensure the indicator is in **TRUCK** mode, see page 91.

**4.** Press ***F2*** to select **2ND WT**.

**Vehicle registration**

EITHER

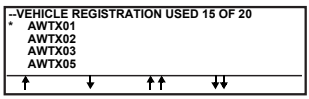
**5a).** Type the vehicle registration and press ***ENTER***.




OR

Or

**5b).** Press ***F5*** to browse the list of stored vehicles.



### Other information (If prompted)

You may be prompted to enter additional information, for example operator or customer details.

**6.** Enter any additional information requested.

### Finish the weighing sequence

**7.** Press ***PRINT*** when prompted.

**8.** Ensure the vehicle drives off the weighbridge.

## 6.3 Two-stage weighing

In two-stage weighing you must take a first and a second weighing.

**Example:**

- First weighing - Into the compound.
- Second weighing - Out of the compound.

### Typical two-stage weighing procedure

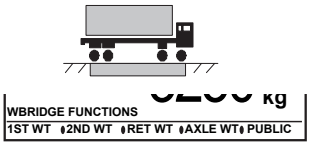
Follow the on-screen prompts and enter the information requested.

The following is an example of a typical weighing sequence. The actual steps required depend how your indicator is configured.

**First weighing**

**1.** Ensure indicator reads zero **before** the truck drives onto the weighbridge. Press ***ZERO*** if required.

**2.** Vehicle drives onto weighbridge.



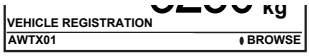

**3.** Ensure the indicator is in **TRUCK** mode (see page 91).

**4.** Press ***F1*** to select **1ST WT**.

**Vehicle registration**

EITHER

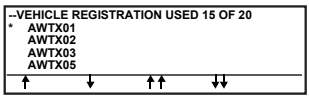
**5a).** Type the vehicle registration and press ***ENTER***.




OR

Or

**5b).** Press ***F5*** to browse the list of stored vehicles.

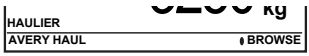


### Haulier (If prompted)

When weighing a vehicle for the first time, you may be prompted to enter haulier details.

EITHER

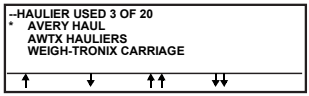
**6a).** Type the haulier's name, then press ***ENTER***.




OR

Or

**6b).** Press ***F5*** to BROWSE the list of available hauliers.




### Other information (if prompted)

You may be prompted to enter additional information such as the operator's details.

**7.** Enter any additional information requested.

### Print or store first weight

You will be prompted to either ***PRINT*** or **STORE** (***F1***) the first weight.

**8.** Press ***PRINT*** or ***F1*** (**STORE**) as prompted.

### Finish the first weighing

**9.** Vehicle drives off the weighbridge.

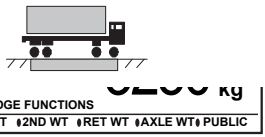
**10.** Load or unloading the goods.

### Second weighing

This is done after the vehicle has been loaded or unloaded.

**11.** Make sure that the indicator reads zero **before** the truck drives onto the weighbridge. If necvessary, press ***ZERO***.

**12.** Vehicle drives onto the weighbridge.



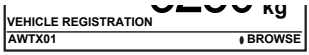

**13.** Make sure that the indicator is in the **TRUCK** mode (see page 91).

**14.** Press ***F2*** to select **2ND WT**.

### Vehicle registration

EITHER

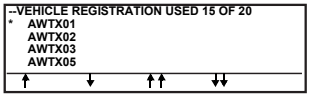
**15a).** Type the vehicle registration and press ***ENTER***.




OR

Or

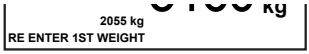
**15b).** Press ***F5*** to browse the list of stored vehicles.




### Re-enter first weight (if prompted)

**16.** Enter the first weight, as recorded on the first weigh printout.

Example




### Other information (If prompted)

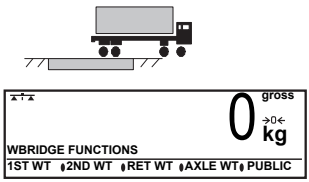
You may be prompted to enter additional information such as the operator's or customer's details.

**17.** Enter any additional information requested.

### Finish the weighing sequence

**18.** Press ***PRINT*** when prompted.

**19.** Make sure that the vehicle drives off the weighbridge.



## 6.4 Multi-stage weighing

(Multiple first weights)

For vehicles whose loads consist of a number of distinct portions, for example when weighing various liquids into the compartments of a tanker.

As each portion is loaded onto the vehicle you can perform a '1st weight' operation.

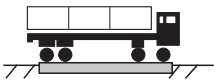
The indicator stores each of these weights, so that when you print the final 2nd weight ticket, you can see each portion of the total load as a separate item.

***Note:*** *Up to 10 separate weighings are allowed.*

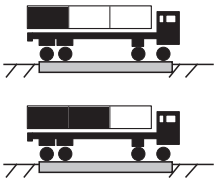
**Example:**

***Note:*** *The keypress procedure is very similar to that shown for 2 stage weighing on page 97.*

1. **1st weight**.
   Weigh the empty vehicle.



2. **Multiple 1st weight**.
   As each load portion is added, perform a **1ST WT** operation.



3. **2nd weight**.
   When all goods are loaded perform the 2nd weight for the total load.

***Note:*** *This option is only applicable for indicators properly configured for multi-stage weighing. Contact your Avery Weigh-Tronix centre for details.*

## 6.5 NWA - Net weight adjust

***Note:*** *This option is only applicable for indicators properly configured for NWA. Contact your Avery Weigh-Tronix centre for details.*

This is a manual weight entry, used to take into account any part of the load to be discounted, for example to take into account the weight of any dirt within a container.

The net weight can then be adjusted accordingly.

### NWA procedure

Depending upon your system configuration, the NWA adjustment may be done as part of the 1st or 2nd weighing procedure.

NWA entry is either:

- Optional

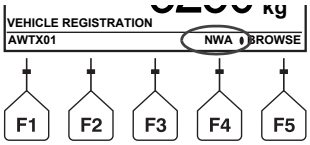
  *OR*

- Mandatory

**Optional NWA**

Enter the NWA value only if required.
(NWA can be selected during either the 1st or 2nd weighing.)

**1.** Press the appropriate ***F*** key to select **NWA**.




**2.** Type the adjustment value, then press ***ENTER***.

**Mandatory NWA**

You will be prompted to enter the NWA value when required.

**1.** Type the adjustment value, then press ***ENTER***

## 6.6 RET WT - Vehicle records

This option enables you to store information about the vehicles to be weighed.

You can assign the following information:

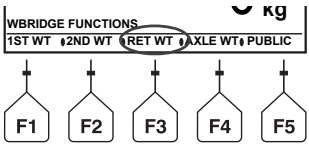
- Tare (empty vehicle) weights, for use with the single stage weighing process (see page 95).
- Haulier details (if available at your indicator).

### Vehicle record procedure

Follow the on-screen prompts and enter the information requested.

**1.** Ensure the indicator is in **TRUCK** mode (see page 91).

**2.** Press the appropriate ***F*** key to select **RET WT**.



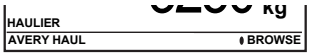

**Haulier (If prompted)**

EITHER

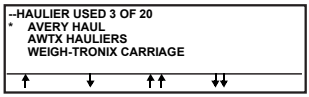
**3a).** Type the haulier name, then press ***ENTER***.

OR

**3b).** Press ***F5*** to BROWSE the list of available hauliers.




Or




***Note:*** *Entering an new haulier name automatically adds it to the browse list.*

**Tares**

You assign a retained tare by either:

- weighing the empty vehicle, or,
- by entering the weight (if known) using the number pad.

The printouts will show the type of tare used.

**1.** Ensure indicator reads zero. Press ***ZERO*** if required.

**2.** Ensure the indicator is in **TRUCK** mode (see page 91).

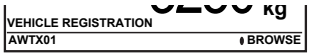
**3.** Press ***F3*** to select **RET WT**.

**4.** Vehicle drives onto weighbridge (if you intend to weigh the empty vehicle).

**Vehicle registration**

EITHER

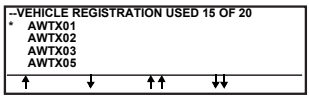
**5a).** Type the vehicle registration and press ***ENTER***.




OR

Or

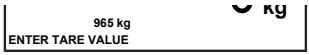
**5b).** Press ***F5*** to browse the list of existing vehicles with stored tare weights.




Then proceed to either step 6a or 6b:

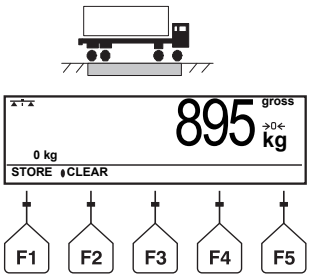
**6a). Keyboard entered tare (KB)** Enter the known weight of the empty vehicle.

Example

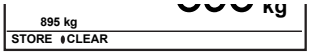



***Note:*** *For a keyboard entered tare - DO NOT press F1 to select STORE as any weight on the weighbridge will be stored as the vehicle tare instead of the weight entered.*

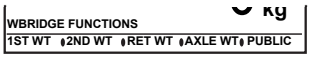
**6b). Pushbutton tare (PB)**
Ensure the empty vehicle is on the weighbridge.




Press ***F1*** to STORE the displayed weight.




**7.** Press ***ENTER*** to save the vehicle record and return to the TRUCK menus.




**8.** Perform single (outbound) weighings for the stored vehicles (see page 95).

## 6.7 AXLE WT - Axle weighing

Axle weighing allows you to ascertain the load at each of the axles on a vehicle.

This can be used to ensure that maximum axle weights are not exceeded.

There are two methods of axle weighing available:

- Single axle weighing. Each axle is weighed individually using a specific axle weighing scale.
- Combined axle weighing. The vehicle is moved on or off the weighbridge one axle at a time.

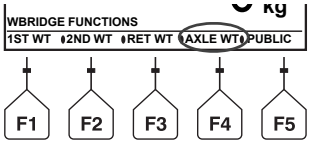
### Typical single axle weighing procedure

Follow the on-screen prompts and enter the information requested.

The following is an example of a typical weighing sequence. The actual steps required depend how your indicator is configured.

1. Ensure indicator reads zero **before** the truck drives onto the axle scale. Press ***ZERO*** if required.

2. Ensure the indicator is in **TRUCK** mode (see page 91).
3. Press the appropriate ***F*** key to select **AXLE WT**.

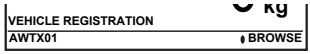


**Vehicle details**

**4. Vehicle registration**. (If prompted)

EITHER

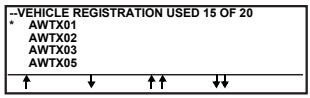
**4a).** Type the vehicle registration and press ***ENTER***.



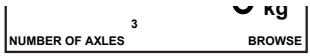

OR

Or

**4b).** Press ***F5*** to browse the list of stored vehicles.



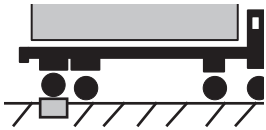

**5. No. of axles**. Type the number of axles and press ***ENTER***.




**Weigh the axles**

**6.** Press ***F4*** to store the weight of the 'empty scale'.

**7.** Drive the vehicle to position the first axle on the axle scale.



**8.** Press ***F4*** to **STORE** the reading.

Example

**9.** Repeat steps 7 and 8 for each of the subsequent axles.

**10.** Press the ***PRINT*** key when all axles have been weighed.

## Typical combined axle weighing procedure

Combined axle weighing is done using a standard weighbridge. There are 2 ways that combined axle weighing can be done:

- Gradually move the vehicle onto the weighbridge. Take the weight each time an axle moves onto the platform.

- Start with the vehicle on the weighbridge, then gradually move the vehicle off the weighbridge, weighing each time an axle moves off the platform.

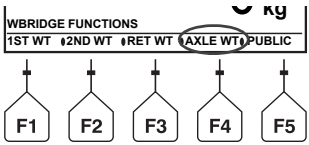
Follow the on-screen prompts and enter the information requested.

The following is an example of a typical weighing sequence. The actual steps required depend how your indicator is configured.

**1.** Ensure indicator reads zero **before** the truck drives onto the axle scale. Press ***ZERO*** if required.

**2.** Ensure the indicator is in **TRUCK** mode (see page 91).

**3.** Press the appropriate ***F*** key to select **AXLE WT**.

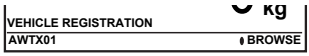



**Vehicle details**

**4.** **Vehicle registration**. (If prompted)

EITHER

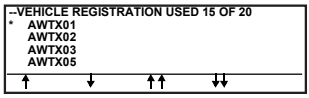
**4a).** Type the vehicle registration and press ***ENTER***.



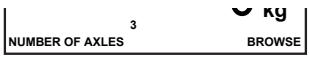

OR

Or

**4b).** Press ***F5*** to browse the list of stored vehicles.




**5.** **No. of axles**. Type the number of axles and press ***ENTER***.



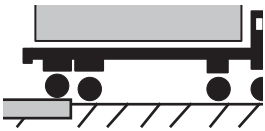
**Weigh the axles**

**6.** Select how you wish to weigh the axles:
**ON (*F4*)**. Weigh the axles as the vehicle moves onto the weighbridge
**OFF (*F5*)**. Weigh the axles as the vehicle moves off the weighbridge.

The following example shows the ON option.

**7.** Press ***F4*** to take the initial weight.
(This will be either the empty weighbridge or the weight with the vehicle on the weighbridge).

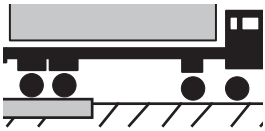
**8.** Drive the vehicle to position the first axle on the weighbridge.



**9.** Press ***F4*** to **STORE** the reading.

Example displays

**10.** Drive the vehicle to position the next axle on the weighbridge.



**11.** Press ***F4*** to **STORE** the reading.

**12.** Repeat steps 10 and 11 for each of the subsequent axles.

**13.** Press the ***PRINT*** key when all axles have been weighed.

## 6.8 Vehicle PLUs

PLUs are used to store (and recall) information about the goods being weighed.

You may be prompted to enter or select a PLU as part of the weighing operation.

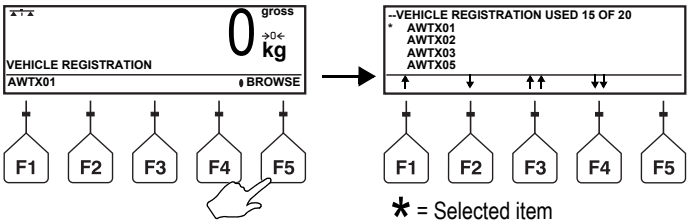
For more details of PLUs and how to use them see *PLUs* *on page 30*.

## 6.9 BROWSE - Stored information

The browse option will sometimes appear as part of a weighbridge sequence.

The browse facility allows you to select stored or previously entered information for use in weighbridge operations.

Example




* = Selected item

**F1** = Select previous
**F2** = Select next
**F3** = Page up
**F4** = Page down

Depending upon indicator configuration you may be able to browse lists of:

- Vehicles.
- Hauliers.
- Customers.

### Adding items to the browse lists

There are 3 ways in which items are added to the browse lists:

1. RET WT option.
   Vehicles with a retained weight are automatically added to the browse list. See page 103.
2. Weighing operations.
   As you proceed with the weighing operations the items within the browse lists are automatically updated.
   **For example:**
   If you enter a new vehicle registration as part of a weighing sequence, this registration is added to the browse list of vehicles.

**3.** Supervisor menu.
Use the options within supervisor mode to add hauliers and customers. See *RECRDS - Vehicle records* *on page 144* for details.

## 6.10 Weighbridge errors

In order to complete the weighing process, a number of conditions must be met.

The following messages may appear which may prevent completion of the weighing sequence.

- **WBRIDGE INTERLOCK, PRESS ESC TO EXIT.**
  The weight on the weighbridge has not changed between the first and second weighings. Ensure that there is a change of weight, or press ***ESC*** to halt the weighing sequence.
- **FAIL: RETURN TO ZERO**
  The load on the weighbridge has not returned to zero since the preceding weighing sequence. Remove and replace the load.
- **FAIL: NO WT CHANGE**
  The weight change since the previous weighing sequence is too small to be detected. If the preceding weighing sequence was **2ND WT** then the load on the weighbridge must return to zero before another 2nd weighing sequence is allowed.
- **FAIL: WT BELOW MIN**
  The weight on the weighbridge is too small to be detected or there is no load on the weighbridge.
- **FAIL: WT NOT STEADY**
  You pressed ***PRINT*** whilst the weight was unsteady. Repeat the sequence.
- **NO STORED WT PRESENT**
  You attempted a **2ND WT** sequence for a vehicle without a current first weight.
- **RECORD EXPIRED**
  The first weight for the vehicle has been stored for longer than the allowed period. You must delete the vehicle record in **SUPER** mode, see page 144.

# 7 SUPER - Supervisor Mode

Supervisor mode enables you to:

- program applications;
- configure system information; and
- print configuration reports.

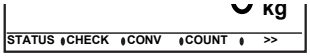
Refer to the table on page 121 for a full list of supervisor functions. Not all the functions shown may be configured at your indicator.

## 7.1 Entering supervisor mode

**To enter SUPER mode:**

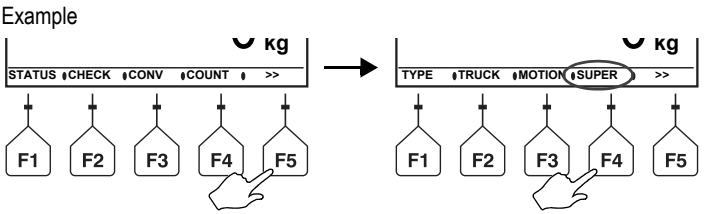
1. Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)

Example displays



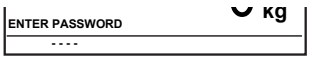

2. Press ***F5*** until the **SUPER** option is displayed, then press the appropriate ***'F'*** key to select.

Example




3. If prompted, enter the required password.

Default supervisor password




***Note:*** *The default password may have been changed. To change the password see page 155.*

**4.** Use the ***'F'*** keys to select from the available options.

- ***F1*** **- EXIT**. Exit supervisor mode.
- ***F2*** **- PRINT**. Print the supervisor configuration (page 118).
- ***F3*** **- ALTER**. Use the ALTER menu to make changes to the supervisor configuration (page 121).
- ***F4*** **- REPORTS**. Access various printed reports, detailing aspects of the system (page 119).

## 7.2 EXIT - Exiting supervisor mode

To exit from supervisor mode and save your settings:

1. Press ***ESC*** to return to the top level menu and display the **EXIT** option.

2. Press ***F1*** to **EXIT**.

**Save changes**

Any changes to the configuration are automatically saved.

## 7.3 PRINT - Print configuration settings

You can print a report listing all of the supervisor settings.

The report will be sent to the printer or other connected device.

**1.** Ensure you are in SUPER mode, see page 115.

**2.** Press ***F2*** to select **PRINT**.

```
SUPERVISOR MODE

SUPER TARE OPTION

  TARE STORE 1
SCALE 1       2.000 kg
  TARE STORE 2
SCALE 1       1.000 kg
  TARE STORE 3
   NOT ALLOCATED

  TARE STORE 40
   NOT ALLOCATED

PASSWORDS
SUPERVISOR PASSWORD
   1793
USER PASSWORD
   111

REAL TIME CLOCK
DATE FORMAT          :
   D-M-Y
TIME FORMAT          :
   24 HR

AUTOMATIC SHUTDOWN   :
   NEVER

LCD CONTRAST         :
    05

USER FIELD TITLES    :
NOT ALLOCATED
NOT ALLOCATED
NOT ALLOCATED

OTHER
SHOW MACHINE STATUS :
   NO

KEYBRD
STANDBY KEY          :
   ENABLE
PRINT KEY            :
   ENABLE
PLU KEY              :
   ENABLE
PRESET TARE KEY      :
   ENABLE
TARE KEY             :
   ENABLE
SELECT KEY           :
   ENABLE
TOTAL KEY            :
   ENABLE
PLATFRM KEY          :
   ENABLE
```

## 7.4 REPORTS - Weighbridge reports

Only applicable for weighbridge indicators using haulier or customer records. Contact your Avery Weigh-Tronix centre for details.

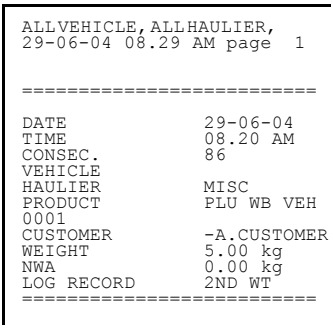
Provides a customise-able printed report of weighbridge transactions at the indicator.

1. Ensure you are in SUPER mode, see page 115.

2. Press ***F4*** to select **REPORTS**.

### Custom reports

The records printed can be filtered to a particular set of criteria (e.g a particular supplier). Use the ***F*** keys to select which fields you wish to use as filters.




- **PLU**. PLUs.
- **VEHICL**. Vehicle records.
- **HAULIER**. Haulier details.
- **SUPPLR**. Supplier details.
- **CUSTOM**. Customer details.

When you have selected your report criteria you can print using the following options:

- **PRINT**. Print the report.
- **TOTLIS**. Print the report and include subtotals for the selected fields.

### Full reports

You can print a complete list of all stored weighbridge operations:

- **LGPRINT**. Print all records.

- **LG RCNT (Log recent)**. Print all transactions which have occurred since the last log printout.

## 7.5 ALTER - Configuring the indicator

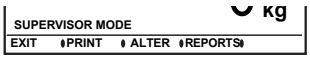
The **ALTER** menu enables you to configure indicator functions and print data reports.

The table below lists all supervisor functions. Not all the functions shown may be configured at your machine.

**To enter the ALTER menu:**

1. Ensure the indicator is in SUPER mode, see page 115.
2. Press ***F3*** to select the **ALTER** menu.
3. Use the ***'F'*** keys to select from the available options.

Example displays




**Full list of options:**

| Option | Description | See page |
|---|---|---|
| **EXIT** | Exit supervisor mode | page 117 |
| **PLU** | PLU configuration | *SUPER PLU MODE on page 155* |
| **TARES** | Stored tare configuration | page 123 |
| **PASSWD** | Password configuration | page 155 |
| **CONV** | Conversion mode units | page 127 |
| **CLOCK** | Date and time settings | page 129 |
| **ACCESS** | Assign passwords to advanced weighing functions | page 156 |
| **LCD** | Display contrast | page 135 |
| **FIELDS** | User defined fields (on-screen prompts) | page 136 |
| **CHECK** | Checkweigh printed text | page 138 |
| **CALIB** | Calibration report | page 140 |
| **TLOG** | Transaction report (if expanded memory card fitted) | page 141 |
| **RECRDS** | Vehicle records | page 144 |

| Option | Description | See page |
|---|---|---|
| **AUDIT** | View / print indicator configuration | page 146 |
| **RECIPE** | Recipe application configuration | *RECIPE programming on page 181* |
| **ALARM** | Alarm configuration | *ALARMS on page 195* |
| **BATCH** | Basic batch information about recipe cycle | page 147 |
| **INFO** | Indicator information | page 148 |
| **KEYBRD** | Enable / disable keys | page 149 |
| **WT DIS** | Enable / Disable dual weight display. | See example on page 14 |
| **REC. NO** | Resettable transcation no. / batch receipt no. | page 154 |
| **NETWRK** | Network ethernet settings | page 150 |
| **S_KEY** | Serial key emulation | page 152 |
| **COUNTER** | Resettable counter for weighbridge mode | page 154 |
| **PWR UP** | Power up into application or operator mode | page 154 |
| **CYLF** | Cylinder filling gas names | page 154 |

***Note:*** *Some options may not be available, depending upon the configuration of the indicator.*

## 7.6 TARES - Stored tares

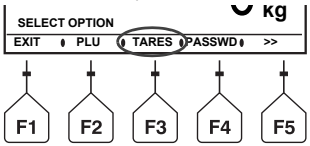
Tares are used to take into account the weight of containers into which goods may be packed.

You can program up to 40 stored tare values which can be assigned to PLUs as required. (See *SUPER PLU MODE on page 155.*)

**To select the stored TARES option:**

1. Ensure the indicator is in the ALTER menu, see page 121.
2. Press the appropriate ***F*** key to select **TARES**.
3. Use the ***'F'*** keys to select from the following options:

Example displays




- ***EDIT***. Edit / Set a stored tare.
- ***DELETE***. Delete a stored tare.

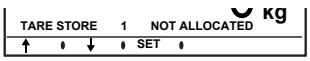
### 7.6.1 EDIT - Create / edit stored tares

There are 3 aspects to creating a stored tare:

- **Tare scale**
  Only available if more than one scale is connected.
- **Tare units**
  Only available if more than one unit of measure is configured.
- **Tare value**
  Set the value (container weight) of the stored tare.

#### Stored tare procedure

1. Press ***F1*** to select **EDIT**.
2. Press ***F1*** and ***F2*** to cycle through the available tare stores.

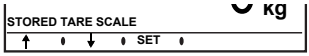



3. Press ***F3*** to program the selected tare.

### Tare scale

Only available if the indicator is connected to more than one scale.

1. Press ***F3*** to select **STORED TARE SCALE**.

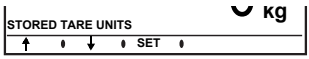



2. Press ***F1*** or ***F2*** to select SCALE1 or SCALE2.
3. Press ***ENTER*** to confirm the selection.

### Tare units

Only available if the indicator is configured for multiple weigh units.

1. Press ***F2*** to display **STORED TARE UNITS**, then press ***F3*** to select it.

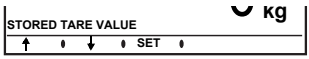



2. Press ***F1*** or ***F2*** to cycle through the available units.
3. Press ***F3*** to select the units displayed.

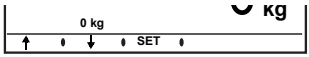
### Tare value (weight)

***Note:*** *Before you can enter a value for the tare store you must first select the scale and the units for the tare. If you forget you will see the message*

1. Press ***F2*** to display **STORED TARE VALUE**.



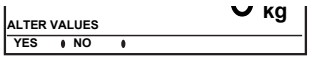

2. Press ***F3*** to select it and display the current value.




Then go to either step 3a or 3b as required.

**3a). Keyboard entered value:**

Press any key.



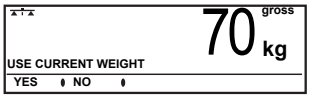
Press ***F1*** (**YES**) to alter the value.

Enter the new tare weight using the keyboard.

OR

**3b). Weighed value:**

Place the container on the scale and press **TARE**.




Press ***F1*** (**YES**) to use the displayed weight.

## 7.7 PASSWD - Changing passwords

Password protection can be used to prevent operators from accessing certain applications. You can change the default supervisor and user passwords for greater system security. The current passwords are listed on the supervisor configuration report, see page 118.

**To select the PASSWD option:**

1. Ensure the indicator is in the ALTER menu, see page 121.
2. Press the appropriate ***F*** key to select **PASSWD**.

Example displays

3. Use the ***'F'*** keys to select from the following options:

- ***SUPER***. View / Edit the supervisor password.
- ***USER***. View / Edit the user password.

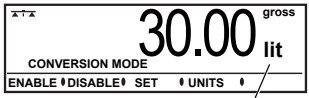
**Default passwords**

USER - ***1 1 1***

SUPER - ***1 7 9 3***

To assign a password to indicator applications see page 133.

## 7.8 CONV - Conversion units




Example shows litres as the unit of measure for the converted value

The conversion application enables you to apply a conversion factor to the net weight on the scale. Converting the weight from kg/lb to another unit of measure (for example litres) requires the indicator to display the correct unit of measure.

This option allows you to program the units that are available with the conversion application. The first conversion unit is preset to PER CENT and cannot be changed.

For more information on conversion mode see page 44.

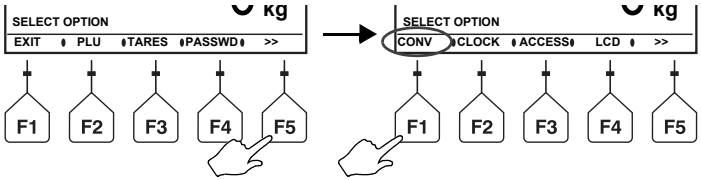
**To select the CONV option:**

1. Ensure the indicator is in the ALTER menu, see page 121.

Example displays

2. Press ***F5*** until the **CONV** option is displayed, then press the appropriate ***'F'*** key to select.

Example




3. Use the ***'F'*** keys to select from the following options:

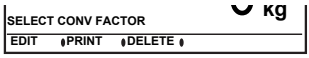
- ***EDIT***. Edit conversion units 2 to 8.
- ***PRINT***. List all conversion units.
- ***DELETE***. Clear conversion units 2 to 8.

***Note:*** *The first conversion unit is fixed and cannot be edited or deleted.*

## EDIT - Edit the conversion units

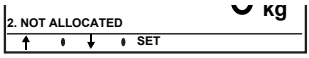
You can set up to 7 conversion units for selection when the indicator is in conversion mode.

1. Display the CONV menu, see page 127.



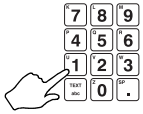

2. Press ***F1*** to select **EDIT**.

3. Press ***F1*** and ***F2*** to cycle through the available units.



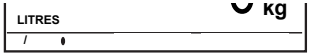

4. Press ***F3*** to edit the displayed unit.

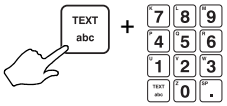
5. Type the required description.



**= 1 2 3 4 5 .....**

Example




**= A B C D .....**

This will be displayed and printed as appropriate, when working in conversion mode.

6. Press ***ENTER***.

7. Press ***ENTER*** to return to the CONV menu.

8. Press ***ESC*** to return to the ALTER menu.

***Note:*** *For more information on conversion mode, see CONV - Conversion mode on page 44.*

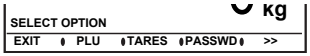
## 7.9 CLOCK - Date and time

Set the date and time (as used on printouts etc).

**To select the CLOCK option:**

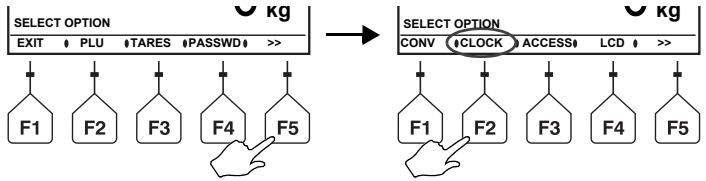
1. Ensure the indicator is in the ALTER menu, see page 121.

Example displays




2. Press ***F5*** until the **CLOCK** option is displayed, then press the appropriate ***'F'*** key to select.

Example



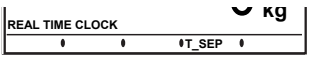

3. Use the ***'F'*** keys to select from the following options:

- ***DATE***. Date and date format.
- ***TIME***. Time and time format.
- ***D_SEP***. Date separator.
- ***T_SEP***. Time separator.

### 7.9.1 DATE - Set date and format

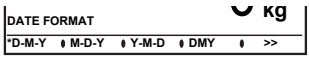
**Set date format**

1. Display the CLOCK menu (see above).




2. Press ***F1*** to select **DATE**.

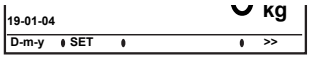
**3.** Use the ***'F'*** keys to select from the following date formats.



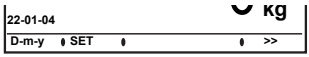

| Format | Example (22nd January 2004) |
|---|---|
| D-M-Y | 22-01-04 *(default date format)* |
| M-D-Y | 01-22-04 |
| Y-M-D | 04-01-22 |
| DMY | 220104 *(separator not required)* |
| MDY | 012204 *(separator not required)* |
| M-D-y | 01-22-2004 |
| D-M-y | 22-01-2004 |
| m-D-y | JAN 22,2004 *(fixed format, separator not required)* |
| D-m-y | 22 JAN,2004 *(fixed format, separator not required)* |

**Set date**

**4.** Press ***F5*** until **SET** is displayed, then press ***F2*** to select it.




**5.** Type the new date, and press ***ENTER***.



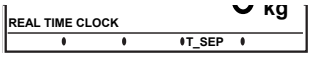

**6.** Press ***ENTER*** to return to the CLOCK menu.

**7.** Press ***ESC*** to return to the ALTER menu.

## 7.9.2 TIME - Set time and format

### Set time format

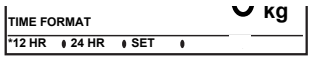
1. Display the CLOCK menu (see page 129).



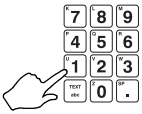

2. Press ***F2*** to select **TIME**.
3. Use the ***'F'*** keys to select from the following time formats:
   **12 HR**
   **24 HR**

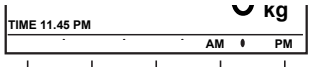
### Set time

4. Press ***F3*** to select **SET**.




5. Type the new time.



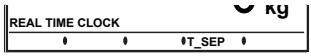

6. If 12 hour time format is selected press ***F4*** or ***F5*** to select AM or PM.
7. Press ***ENTER***.
8. Press ***ENTER*** to return to the CLOCK menu.
9. Press ***ESC*** to return to the ALTER menu.

### 7.9.3 Date and Time separators

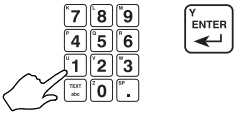
The indicator uses these to separate the characters and numbers that make up the date or time. Some suitable separators are shown below.

| | | | |
|---|---|---|---|
| 44 | , | 47 | / |
| 45 | - | 58 | : |
| 46 | . | | |

1. Display the CLOCK menu (see page 129).




2. Use the ***'F'*** keys to edit either the date separator (D_SEP) or time separator (T_SEP).
3. Enter an ASCII value to select the desired separator.




4. Press ***ESC*** to return to the ALTER menu.

*Default examples:*

| ASCII code | Character | Example |
|---|---|---|
| **D SEP - Date separator** | | |
| 045 | **-** (dash) | 22 **-** 01 **-** 04 |
| **T SEP - Time separator** | | |
| 046 | . (dot) | 11 **.** 45 |

## 7.10 ACCESS - Password protection

You can password protect supervisor mode and the various weighing applications from unauthorised access by requesting the operator to enter the appropriate password.

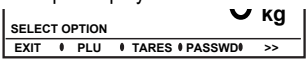
The default setting for indicator applications is unprotected. Once a function is password protected, operators must enter the user password before selecting an application or, when selecting the SUPER function, the supervisor password. Refer to the table over.

***Note:*** *This function assigns a password to the various applications. To set the passwords see PASSWD - Changing passwords* *on page 126**.*

**To assign the passwords:**

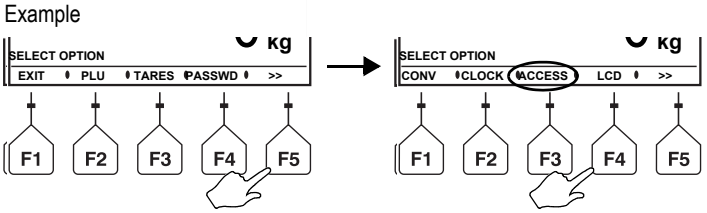
**1.** Ensure the indicator is in the ALTER menu, see page 121.

Example displays




**2.** Press ***F5*** until the **ACCESS** option is displayed, then press the appropriate ***'F'*** key to select.

Example



3. Use the ***'F'*** keys to password protect the following functions:

| Application / Function | Password protected |
|---|---|
| COUNT | USER password required |
| CHECK | USER password required |
| PACK | USER password required |
| CONV | USER password required |
| TYPE | USER password required |
| LIST | USER password required |
| TOTALS | USER password required |
| PEAK_H | USER password required |
| MOTION | USER password required |
| TRUCK | USER password required |
| RECIPE | USER password required |
| STATUS | USER password required |
| ALARMT | USER password required |
| RECIPET | USER password required |
| SUPER | SUPER password required |
| Note: To set the USER and SUPER passwords see *page 126*. | |

## 7.11 LCD - Display contrast

The LCD option allows you to set the contrast of the display.

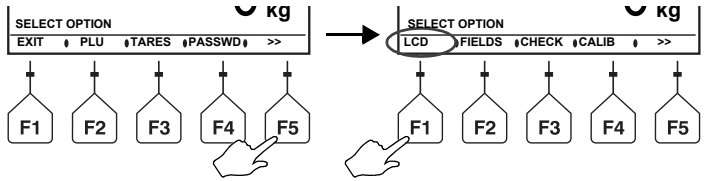
**To set the contrast:**

1. Ensure the indicator is in the ALTER menu, see page 121.

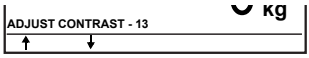
Example displays

2. Press ***F5*** until the **LCD** option is displayed, then press the appropriate ***'F'*** key to select.

Example




3. Use the ***'F'*** keys to adjust the contrast.




4. Press ***ENTER*** when done.

## 7.12 FIELDS - User fields

User fields are used to provide additional information on printouts.

This option enables you to view, print and edit the titles of up to 20 user fields.

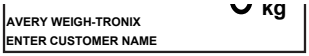
***Note:*** *The fields are assigned to the various applications / print formats during installation. Contact your Avery Weigh-Tronix centre for details.*

### Typical uses

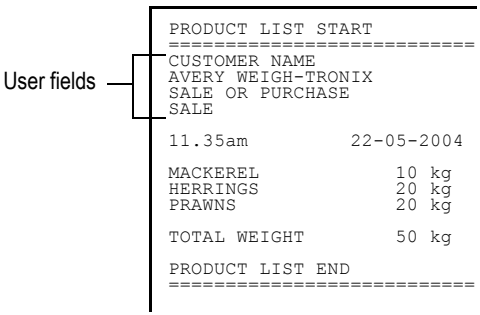
Where a field is used on a printout, the operator is prompted to enter the required information before the printout can proceed.

A common example of this is when using the LIST application (page 47). The operator may be prompted to enter customer details for inclusion on the printed ticket.

**Example - on-screen prompt**




**Example ticket**




### User field titles

The titles of the user fields are used to prompt the operator to enter the required information, e.g. “CUSTOMER NAME”.

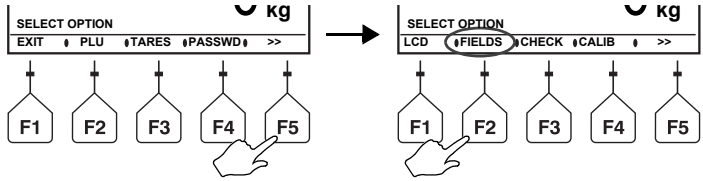
**To access the user field titles:**

1. Ensure the indicator is in the ALTER menu, see page 121.

Example displays

2. Press ***F5*** until the **FIELDS** option is displayed, then press the appropriate ***'F'*** key to select.

Example




3. Use the ***'F'*** keys to select from the following options:

- ***EDIT***. Edit the field titles.
- ***PRINT***. Print the field titles to the printer or other connected device.
- ***DELETE***. Erase the user field titles.

***Note:*** *To change the assignment of the fields to the various applications and printouts contact your Avery Weigh-Tronix centre.*

## 7.13 CHECK - Checkweigh text

Only applicable for indicators utilising checkweigh printouts.

The checkweigh application is used to weigh products to a target weight. The goods weighed can be either:

- *UNDER*
- *OVER*
- *ACCEPT*

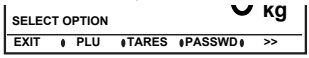
The printed tickets may include text to indicate which of the above applies to a particular weighing.

You can edit the text printed using this option.

**To edit the checkweigh text:**

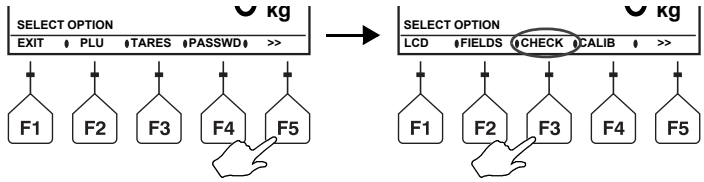
**1.** Ensure the indicator is in the ALTER menu, see page 121.

Example displays




**2.** Press ***F5*** until the **CHECK** option is displayed, then press the appropriate ***'F'*** key to select.

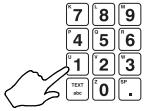
Example



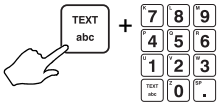

**3.** Use the ***'F'*** keys to select from the following options:

- ***UNDER***. Edit the UNDER text.
- ***OVER***. Edit the OVER text.
- ***ACCEPT***. Edit the ACCEPT text.
- ***RESET***. Reset all checkweigh text to the default values.

Use the keypad to enter text or numbers as required.




**= 1 2 3 4 5 .....**




**= A B C D .....**

***Note:*** *Checkweigh texts are only printed if your printouts are configured with the 'UNDER', 'OVER' or 'ACCEPT' checkweigh texts.*

## 7.14 CALIB - Calibration report

The calibration report details calibration and set up information for each scale connected to the indicator.

**To print or view the calibration report:**

1. Ensure the indicator is in the ALTER menu, see page 121.
2. Press ***F3*** until the **CALIB** option is displayed, then press the appropriate ***F*** key to select.
3. Press either:
   ***F1*** - Print report
   ***F2*** - View the report on the display
4. Press ***ENTER*** when done.

```
CALIB SECURITY REPRT


SCALE 1 SETUP

SCALE 1              : ************
UNITS                :
   kg
ALTERNATE UNITS      :
   NO
INCREMENT            :
   2
DECIMAL MARKER POSN  :
   1234.567
CAPACITY             :
      5.000 kg
WEIGHER STEADY       :
     10
WEIGHT STEADY BAND   :
      1
FIR FILTER           :
      2

SET LINEARISER       :
BACK-BALANCE         : ************
CALIBRATED           :
   10.37 AM
   18-02-04
SERVICE ENGINEER     :

GREATEST WEIGHT      :
       1.640 kg
OCCURRED             :
   12.25 PM
   18-02-04


GENERAL

SERIAL NUMBER        :

INDICATOR TIME ON    :
24 HR
```

## 7.15 TRANS - Transaction log

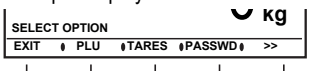
Only applicable for indicators installed with an expanded memory card and with transaction log application enabled. Contact your Avery Weigh-Tronix centre for details.

The transaction log records details of each weighing or totals transaction that occurs.

**To print or view the transaction log:**

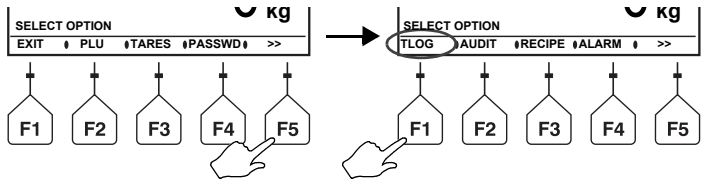
1. Ensure that the indicator is in the ALTER menu, see page 121.

Example displays




2. Press ***F5*** until the **TLOG** option is displayed, then press the appropriate ***'F'*** key to select.

Example




**To delete the transaction log:**

1. Make sure you are in Transaction Log Menu.
2. Press **F1 - DELETE**.
3. You can delete all transactions done in:

- the last three months by pressing **F1**
- the last six months by pressing **F2**
- the year by pressing **F3**.

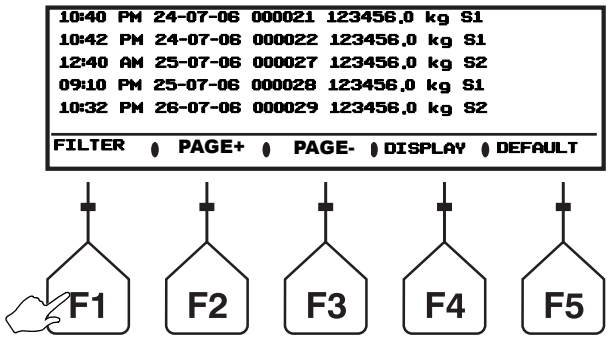
**To view transaction report:**

1. Make sure you are in Transaction Log Menu.
2. Press **F2 - REPORT**.

3. Use the "**F**" keys to select from the following options:

- **FILTER** = To create a filter (see below).
- **PAGE+** = To see next page.
- **PAGE-** = To see previous page.
- **DISPLAY =** To change the way information is displayed.
- **DEFAULT** = To come back to the default screen with all the transactions.

Example:




**To filter the transactions:**

1. Make sure you are in Report Menu.
2. Press **F1 - FILTER**.
3. Use the keyboard to enter the value you want:

- Press 1 **- START CONSEC** to display transactions from the consecutive number you enter with the keyboard.
- Press 2 **- END CONSEC** to stop displaying transactions after the consecutive number you enter with the keyboard.
- Press 3 **- START TIME & DATE** to display transactions from a date you enter with the keyboard.

- Press 4 **- END TIME & DATE** to stop displaying transactions after a date you enter with keyboard.

- Press 5 **- SCALE SELECTION** to display transactions from a selected scale you select with the "**F**" key.

**4.** When you have entered values you want, press **F5 - SEARCH** to display transactions that fit the filter you have created.

**5.** Press **F5 - DEFAULT** to return to the displayed transactions without a filter.

**To change the way information is displayed:**

**1.** Press **F4 - DISPLAY** to display the consecutive number, net weight, SA tare, PT tare and units.

**2.** Press **F4 - DISPLAY** again to come back to the default display of time, date, consecutive number, net weight, ID of the scale

## 7.16 RECRDS - Vehicle records

Only applicable for indicators with the truck (Weighbridge) application enabled. Contact your Avery Weigh-Tronix centre for details.

The indicator has a database of information / records associated with the TRUCK application

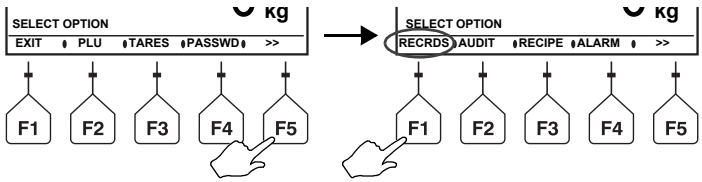
This option allows you to view and edit the TRUCK records.

**1.** Ensure the indicator is in the ALTER menu, see page 121.

Example displays

**2.** Press ***F5*** until the **RECRDS** option is displayed, then press the appropriate ***'F'*** key to select.

Example




**3.** Use the ***'F'*** keys to select from the following options:

- **PLU**. Create / edit PLUs (see page 155).
- **VEHICL**. View / amend vehicle details.
- **HAULIER**. View / amend haulier details.
- **SUPPLR**. View / amend supplier details.
- **CUSTOM**. View / amend customer details.
- **LOG**. View haulier transactions.
  (This will be empty if reports have already been printed, see page 119).

## VEHICL - Vehicle records

Vehicle information stored at the indicator.

- ***PRINT***. Print vehicle details to a connected printer.
  Select either:
  **IN USE**. Vehicles currently in use.
  **TARED**. Vehicles with a retained weight record.
- ***DELETE***. Delete selected vehicle details including the 1st weight if entered.
  Select either:
  **1 VEH**. Select a vehicle to delete.
  **ALL**. Delete all vehicle details.
- **MISC**. Customise the TEXT used to prompt the operator to enter a vehicle registration.
- ***SELECT***. View / amend vehicle details.
  Select the required vehicle, then:
  **MODIFY**. Change vehicle registration.
  **DELETE**. Delete vehicle.
  **PRINT**. Print vehicle details.
  **CLEAR**. Clear vehicle totals.

### See also...

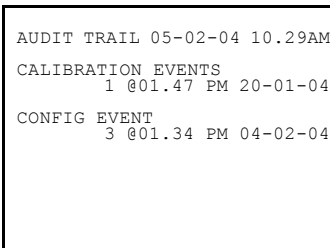
- Truck application, see *TRUCK - Weighbridge* *on page 91*.
- Weighbridge reports, *REPORTS - Weighbridge reports* *on page 119*.

## 7.17 AUDIT - Audit log

The audit log records details of each calibration or configuration change made to the indicator. The log may be used by your Avery Weigh-Tronix centre to keep track of service changes to the indicator.

**To print or view the audit log:**

1. Ensure the indicator is in the ALTER menu, see page 121.
2. Press ***F3*** until the **AUDIT** option is displayed, then press the appropriate ***F*** key to select.




3. Press either:
   ***F1*** - Print to COM 1.
   ***F2*** - View the report on the display.
4. Press ***ENTER*** when done.

## 7.18 BATCH Information

Batch information is displayed after each recipe cycle sequence.

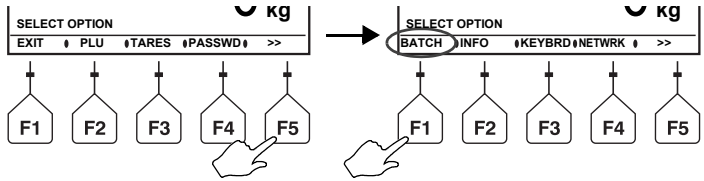
**To turn BATCH on or off:**

1. Ensure the indicator is in the ALTER menu, see page 121.

Example displays

2. Press ***F5*** until the **BATCH** option is displayed, then press the appropriate ***'F'*** key to select.

Example




3. Select either:
   ***F1*** - **NO** - Batch information is disabled.
   ***F2*** - **YES** - Batch information is enabled.
4. Press ***ENTER*** when done.

## 7.19 INFO - Information line

The information line is displayed below the weight reading and gives the operator information regarding the indicator status (for example, the number of an active PLU):

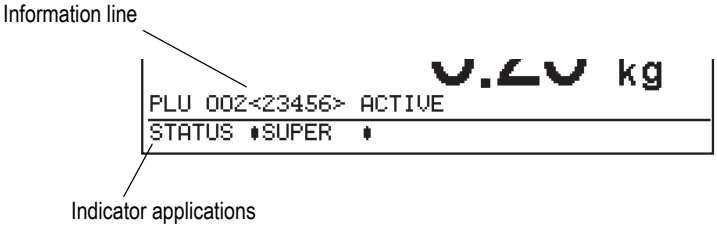



**Figure 7.1 Typical information line**

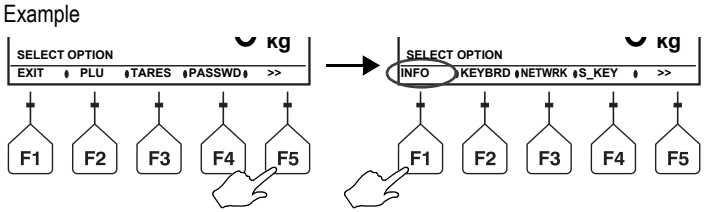
**To turn the information on or off:**

1. Ensure the indicator is in the ALTER menu, see page 121.

Example displays

2. Press ***F5*** until the **INFO** option is displayed, then press the appropriate ***'F'*** key to select.

Example




3. Select either:
   ***F1*** - **NO** - information line is disabled.
   ***F2*** - **YES** - information line is enabled.
4. Press ***ENTER*** when done.

## 7.20 KEYBRD - Enable / Disable keys

You can enable / disable any of the following function keys. To check the status of the keys print the supervisor mode configuration settings (see page 118).

ON/OFF key

Scale key

Total key

Select key

Zero key

Tare key

PLU key

Print key

Units key

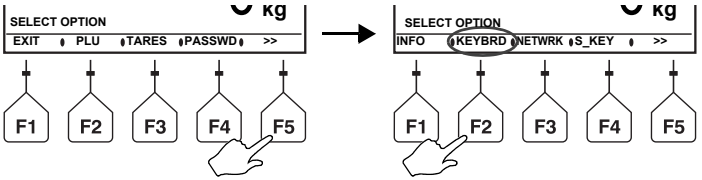
**To enable disable keys:**

1. Ensure the indicator is in the ALTER menu, see page 121.

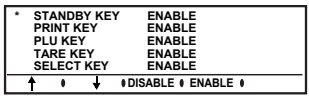
Example displays

2. Press ***F5*** until the **KEYBRD** option is displayed, then press the appropriate **'*F'*** key to select.

Example




3. Press ***F1*** and ***F2*** to select the required key.




4. Select either:
   ***F3*** - DISABLE the displayed key.
   ***F4*** - ENABLE the displayed key.
5. Press ***ENTER*** when done.

## 7.21 NETWRK - Network details

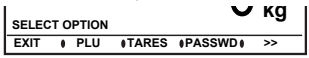
Your indicator may be connected to an ethernet network. This is typically used by service personnel for:

- Remote configuration of the indicator.
- Connection of a PC for service set up, software updates and backup / restore operations.

**To access the NETWRK option:**

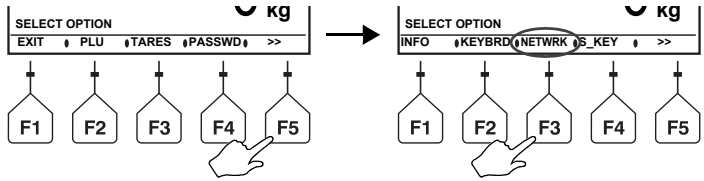
1. Ensure the indicator is in the ALTER menu, see page 121.

Example displays




2. Press ***F5*** until the **NETWRK** option is displayed, then press the appropriate ***'F'*** key to select.

Example




3. Use the ***'F'*** keys to select from the following options:

- ***IP***. Set the IP address.
- ***SUBNET***. Set the subnet mask.
- ***GATE***. Set the gateway address.
- **ASSET**. Add an "Asset Name" to the indicator.
- **HOSTNM**. Set the indicator's name. (alpha-numeric field)

### IP address / Subnet mask

The indicator communicates on an ethernet network using the TCP / IP protocol.

The TCP/IP protocol uses an **IP address** and a **Subnet mask** to address packets of data correctly.

**IP address notes:**

The IP address is used to identify the source and destination of data packets. Hence each machine on the network must have a unique IP address.

The IP address of the machine consists of two parts:

- **Network address**. Same as all other machines on a network.
- **Machine address**. Different from all other machines on the network.

**Sub-net mask notes:**

The sub-net mask defines how the IP address is split into its network and machine components.

Examples:

The following table shows how the address 88.1.1.7 would be used, depending upon the subnet mask.

| Sub-net mask | 255.0.0.0 | 255.255.0.0 | 255.255.255.0 |
|---|---|---|---|
| Network address | **88**.0.0.0 | **88**.**1**.0.0 | **88**.**1**.**1**.0 |
| Machine address | 88.1.**1.7** | 88.1.**1.7** | 88.1.1.**7** |

## Gateway IP address

A gateway can be used to bridge between 2 devices with different network addresses.

The address set here is the address of the gateway, as it appears on the local network.

## Indicator asset name

You can enter a unique ASSET name for the indicator in addition to its IP address. The ASSET name can have up to 12 alphanumeric characters. When the indicator receives a network scan packet from Etools, it replies with the Asset Name as well as its IP address.

1. Make sure you are in NETWRK option.
2. Press F4 - ASSET.
3. Enter the Asset ID required.

## 7.22 S_KEY - Remote keyboard emulation

Only applicable if your indicator is configured for remote keyboard emulation via a serial (COM) port. Contact your Avery Weigh-Tronix centre for details.

A computer or other suitable device connected to a serial port can be used instead of the integral keypad for certain keypresses at the indicator.

### Applicable keys

The following keys can be setup for remote operation.

Tare key

Select key

Zero key

Print key

Units key

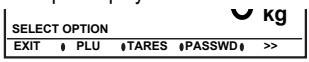
### Configuring the keys

Key-presses are emulated using ASCII codes. When the indicator receives the appropriate ASCII codes on the serial port, it will carry out the appropriate key-press action.

**To configure serial keys:**

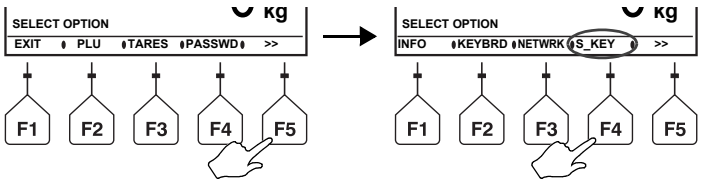
1. Ensure the indicator is in the ALTER menu, see page 121.

Example displays




2. Press ***F5*** until the **S_KEY** option is displayed, then press the appropriate ***'F'*** key to select.

Example



**3.** Use the ***'F'*** keys to select from the following options:

- ***TARE***. Set the TARE key ASCII code.
- ***SELECT***. Set the SELECT key ASCII code.
- ***ZERO***. Set the ZERO key ASCII code.
- ***PRINT***. Set the PRINT key ASCII code.
- ***UNITS***. Set the UNITS key ASCII code.

**4.** Press ***F1*** to select **YES** to change the code for key-press emulation.

**5.** Enter the ASCII code required to emulate the selected key.

| Key | ASCII code |
|---|---|
| TARE | 084 |
| SELECT | 083 |
| ZERO | 090 |
| PRINT | 080 |
| UNITS | 085 |

## 7.23 REC. NO - Batch receipt number

There is a function to reset the transaction number and the batch receipt number (REC. NO) counter. This allows you to set the receipt number to a chosen value.

## 7.24 COUNTR - Resettable counter

When this feature is enabled, this menu allows the operator to set the resettable counter value.

- The **Non-resettable Counter** gives the last count.
- The **Reset Point** is the point at which you reset the counter.
- The **Reset Count** is the new setting for the counter (that is to say, number 1) after you reset the counter.

## 7.25 PWR UP - Power up mode

The Power Up (PWR UP) function is in the power up menu. When you enter the power up menu, the system asks you to confirm by selecting either YES or NO if you want to restore the application and power up.

If you select the NO option, the system will power up next time you use it at the initial system screen.

If you select the YES option, the system will automatically power up next time in the same application that was in use when the indicator was last switched off.

## 7.26 CYLF - Cylinder filling

In the Cylinder Filling (CYLF) mode two text fields are available called BUTANE and PROPANE. You can enter text into these fileds to print your alternative information to replace the butane or propane types of gas cylinder fillings.

For example, it is possible to print ‘CO2’ instead of ‘BUTANE’ or ’NITROGEN’ instead of ‘PROPANE.’

The fileds are the names of the gas that the indicator prints.

# 8 SUPER PLU MODE

Only applicable for indicators with PLUs enabled. Contact your Avery Weigh-Tronix centre for details.

## 8.1 Enter SUPER PLU MODE

PLUs (Product Look-Up) are used to store information about a particular product.

SUPER PLU MODE allows you to configure each PLU to suit the particular product or type of operation. You can store information such as:

- units
- tares
- application specific information

to set how the product is to be weighed.

Each time a product is weighed, the operator can recall the PLU to set the indicator with the appropriate information.

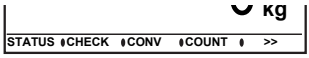
PLUs are configured in SUPER PLU MODE.

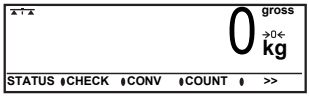
**To enter SUPER PLU MODE:**

**1.** Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)

**2.** Check that the display reads zero. (Press the ***ZERO*** key if required.)

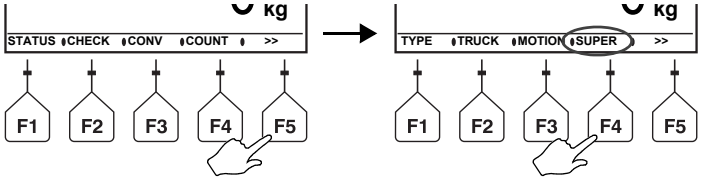
Example displays



**3.** Press ***F5*** until the **SUPER** option is displayed, then press the appropriate ***'F'*** key to select.

Example



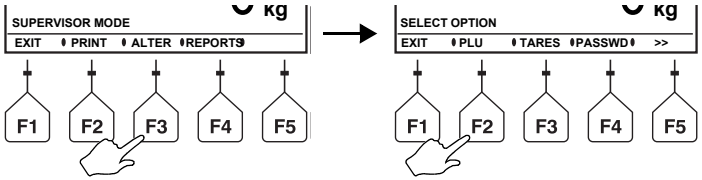

**4.** If prompted, enter the required password.

Default supervisor password

**5.** Press ***F3*** to select the **ALTER** menu.

**6.** Press ***F2*** **(PLU)** to enter SUPER PLU MODE.

Example




**7.** Use the ***'F'*** keys to select from the following options:

- **EDIT**. Create / Edit a PLU.
- **PRINT**. Print PLU details.
- **DELETE**. Delete a PLU.
- **MISC**. Change menu titles.

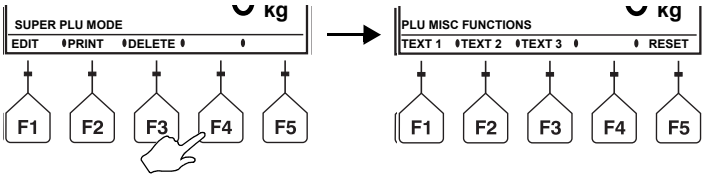
### 8.1.1 Change menu titles

The **MISC** function enables you to:

- change titles in the PLU menu
- change the new titles back to the original settings

The new titles are displayed when you create or edit a PLU and may be changed back to the original titles at any time.

Example



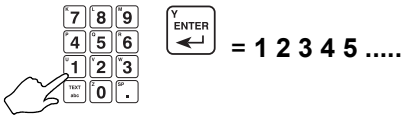

Press ***F1*** to edit ***TEXT 1*** - PART NUMBER.

Press ***F2*** to edit ***TEXT 2*** - DESCRIPTION.

Press ***F3*** to edit ***TEXT 3*** - USER TEXT.

Press ***F5*** to ***RESET*** and revert to the original titles.

Use the keypad to enter text or numbers as required. Press ***ENTER*** when done.



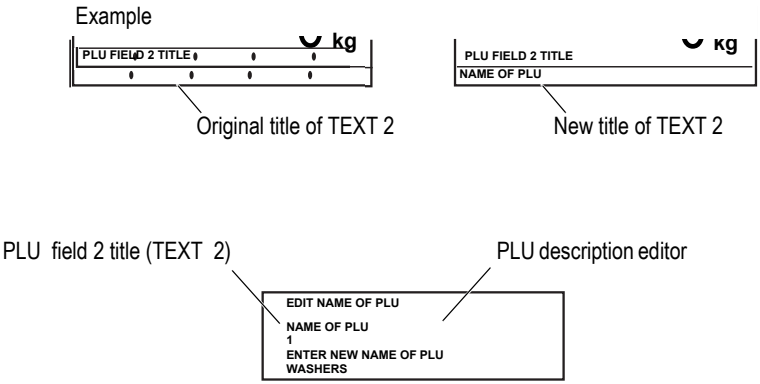
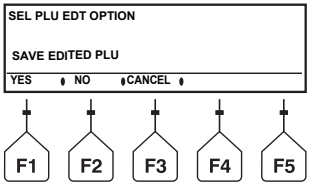



**Figure 8.1 Changing menu titles**

## 8.2 Exit SUPER PLU MODE

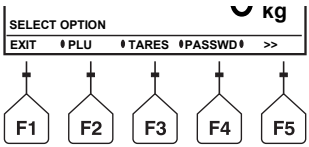
When exiting from the PLU editor you will have the opportunity to save any changes made.

**1.** Press ***ESC***.

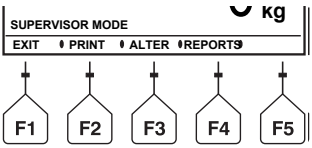



**2.** Press:
***F1*** to save changes
***F2*** to ignore changes
***F3*** to remain in PLU mode

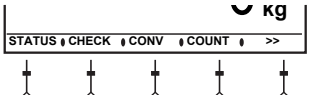
**3.** Press ***ESC*** to return to the ALTER menu.




**4.** Press ***F1*** to return to SUPERVISOR MODE.




**5.** Press ***F1*** to return to operator mode.



## 8.3 Create / Edit PLUs

The indicator can store a minimum of 100 PLUs which can be increased to a maximum of 900 PLUs on installation.

**To create / edit a PLU:**

**1.** Ensure the indicator is in SUPER PLU MODE, see page 155.

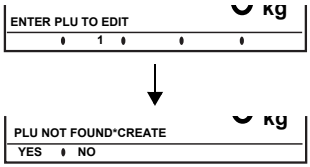
Example displays

**2.** Press ***F1*** to select the **EDIT** option.

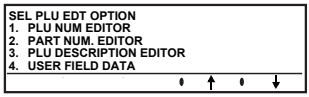
EITHER

***3a). New PLU***

Enter the PLU number to be created (range 1 - 999).




Press ***F1*** to select **YES**.

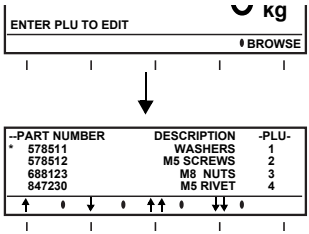



OR

***3b). Existing PLU***

Press ***F5*** to browse the list of existing PLUs.

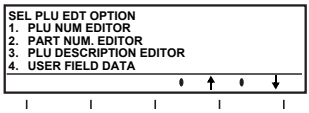
Use the ***'F'*** keys to browse, then press ***ENTER*** to select the highlighted PLU.




**4.** Configure PLU options (see page 161).

## 8.4 PLU configuration options

- Use the number pad to select from the displayed options.



- Press ***F4*** and ***F5*** to display more options.

SUPER PLU MODE

| EDIT (F1) | PRINT | DELETE | MISC |
|---|---|---|---|
| | page 156 | page 156 | page 157 |

| PLU EDIT options | SET - Selections | |
|---|---|---|
| PLU NUM EDITOR page 164 | Change PLU index number | |
| PART NUM. EDITOR page 164 | Enter part number digits | |
| PLU DESCRIPTION EDITOR page 164 | Enter PLU description | |
| USER FIELD DATA page 164 | Text for user prompt | *Only if user fields have been configured.* |
| PLU UNITS page 164 | kg<br>lb | *Only if alternate units have been configured.* |
| PLU SCALE page 165 | SCALE 1 SCALE 2 | *Only if a second scale has been configured.* |
| PLU TYPE page 165 | NO OPTION<br>COUNTING<br>CHECKWEIGH<br>PACKING PLU<br>CYLINDER FILLING<br>RECIPE | *Only if applications have been configured.* |
| CONVERSION FACTOR page 167 | DISABLE CONV FACT<br>SET CONV FACTOR<br>SET FACTOR UNITS | *Only if conversion factor has been configured.* |

SUPER PLU MODE (continued)

| PLU EDIT options | SET - Selections | |
|---|---|---|
| PRODUCT LISTING<br>page 167 | DISABLE / ENABLE | *Only if product listing has been configured.* |
| SET PLU COUNTING<br>page 166 | DISABLE COUNTING<br>COUNT BY SAMPLE<br>COUNT BY PCE WT<br>SET COUNT TARGET<br>COUNTING MODE<br>DERIVE PIECE WT | *Only available if PLU type is set to counting.* |
| SET CHECKWEIGHING<br>page 167 | DISABLE CHKWGH<br>SET LO ACCEPT LIM<br>SET HI ACCEPT LIM<br>TARGET<br>LO TOL<br>HI TOL | *Only if checkweighing is configured for limits.*<br>*Only if checkweighing is configured for a tolerated weight below and above the target weight.* |
| PACK RUN SETUP<br>page 167 | LEVELS<br>DISABLE<br>DATES<br>CHECK<br>COUNT<br>RECIPE | *Only if pack run application has been configured.* |
| SET PLU TARE STORE<br>page 170 | DISABLE TARE<br>SET STORE TARE INDEX<br>SET TARE VALUE | *Only if PLU tares have been configured.* |
| EDIT PLU TOTALS<br>page 174 | EDIT SUB-TOTAL<br>EDIT SUBTOT COUNT<br>EDIT GRAND TOTAL<br>EDIT GRAND TOT COUNT<br>STOCK LEVEL<br>DIRT TOTAL | *Only if PLU totals have been configured.* |
| SET CYLF PARAMETERS<br>page 176 | CYL FILL VALUES<br>TARE BAND UNITS<br>TARE BANDS<br>MAX NEG NET WT<br>DOSE TIME<br>FAST TARE ENTRY<br>NUM TARE DIGITS<br>LARGE TARE DISPLAY | *Only if cylinder filling has been configured.* |

***Note:*** *The following must always be configured:*
*PLU UNITS. For any indicator with more than 1 unit of weight.*
*PLU SCALE. For any indicator with more than 1 scale connected.*

## PLU NUM EDITOR

- **PLU NUMBER** (1-999). Enter a number that the operator can enter to recall the PLU for use.

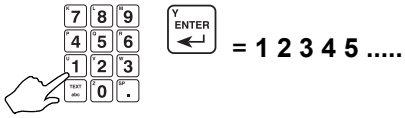
## PART NUM EDITOR

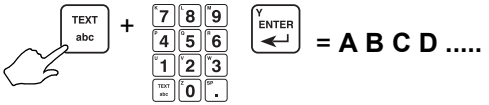
- **PART NUMBER** (20 digit number). Enter a part number for the product that the operator can enter to recall the PLU for use.

## PLU DESCRIPTION EDITOR

Enter a product description for the PLU (up to 20 characters).

- Use the keypad to enter text or numbers as required.




## USER FIELD DATA

(Only for indicators with user fields configured.)

User fields provide additional information on printouts by prompting the operator for more information. The operator is required to enter the information before printing can proceed. Enter the text for the prompt.

## PLU UNITS

(Only for indicators with more than 1 unit of measure.)

- Select the unit of weight to be used for this product.

## PLU SCALE

(Only for indicators with more than 1 scale connected.)

- Specify which scale will be used by the PLU.

## PLU TYPE

Set the PLU to work only with a particular weighing mode.

When the PLU is recalled the indicator will revert to the appropriate weighing mode.

- **NO OPTION**. The PLU has no default operating mode.
- **COUNTING**. The PLU is configured for basic counting operation. (See page 75 for further counting options.)
- **CHECKWEIGH**. The PLU operates in checkweigh mode. (See page 39 for further checkweigh options).
- **PACKING PLU.** The PLU uses a simple pack run. (See for further packing options.)
- **CYL FILL.** The PLU operates in gas filling or gas filling check weighing mode, see page 176.
- **RECIPE.** The PLU recalls a recipe, see page 170.

## CONVERSION FACTOR

Apply a conversion factor to the net weight on the scale. For example, convert the weight from kg/lb to another unit of measure such as litres and display and print the new unit of measure.

For more information on conversion mode see page 44.

## PRODUCT LISTING

Set parameters for use with the product listing option.

- **DISABLE**. The PLU will not work with the product list option.
- **ENABLE**. The PLU will work with the product list option.

(See *LIST - Product listing on page 47*.)

## SET PLU COUNTING

Only if the PLU TYPE is set to COUNTING (page 165).

Provides preset conditions for a counting PLU.

For more information on counting operations see page 75.

- **DISABLE COUNTING**. This PLU will no longer operate in counting mode.
- **COUNT BY SAMPLE**. When using the PLU the operator must sample a batch of the product to derive the piece weight.

  **SAMPLE SIZE**. Enter the number of items that the operator will be required to sample.

- **COUNT BY PCE WT**. Enter the piece weight for the counted product.
  When the PLU is recalled the sampling option is disabled.
- **SET COUNT TARGET**. Set the target quantity for the product count.
- **COUNTING MODE**. Set the default count mode for the PLU.

  **BULK**. The PLU operates in BULK count mode.

  **DRIBBL**. The PLU operates in DRIBBLE count mode.

- **DERIVE PIECE WT**. Sample a quantity of the product to derive a piece weight.

  **+ or - SAMPLES**. Place the sample quantity on the scale. Sample must be either 10, 20 or 50 items.

  **SELECT SAMPLE SIZE**. Type the sample size used OR use the ***'F'*** keys to select from the sizes displayed.

## SET PLU CHECKWEIGHING

Only if the PLU TYPE is set to CHECKWEIGH (page 165).

Provides PLU options for use in checkweighing mode.

For more information on checkweighing operations see page 39.

- **DISABLE CHECKWEIGHING**. This PLU will no longer operate in checkweigh mode.

### LIMITS OR TOLERANCES

The options available depend upon how your indicator was configured on installation.

You will use one of the following methods to set the checkweigh band:

- **SET HI and LO ACCEPT LIM**. Enter the maximum and minimum target weights. Sample the target weight.

*OR*

- **SET TARGET plus HI and LO TOLERANCE**. Enter or sample the target weight and an acceptable upper and lower tolerance.

## PACKING RUN SET UP

Set parameters, including checkweighing and counting parameters, for use with a pack run.

- **LEVELS.** Select level 1 to 3. You can then set the following parameters for the selected level:

  **DISABLE THIS LEVEL**
  The pack run will ignore this level.

  **SET LEVEL SIZE**
  The number of labels required for this level.

  **SET LEVEL MIN WT**
  The minimum permitted weight for each pack.

- **DISABLE PACK RUN**. The PLU will not work with the pack run option.

- **DATES**. The number of days to be added when dates 1 and 2 are printed.

  **SET DATE OFFSET 1**

  **SET DATE OFFSET 2**

- **CHECK**. Program checkweigh parameters ***for use with a pack run***. The options available depend on indicator configuration. For more information on checkweighing see page 39.

  The parameters entered here only apply to the PLU and only when the PLU is used for a pack run.

  **DISABLE PLU PACK CHECKWEIGHING**
  The pack run will not use checkweighing.

  *If the indicator is configured for limits:*

  **PLU CHECKWEIGH LO LIMIT**
  The minimum target weight for each pack in the pack run.

  **PLU CHECKWEIGH HI LIMIT**
  The maximum target weight for each pack in the pack run.

  *If the indicator is configured for tolerated weight below and above a target weight:*

  **PLU CHECKWEIGH LO TOLERANCE**
  The acceptable tolerance below the target weight for each pack in the pack run.
  ***Example:*** target weight - 0.5 kg

  **PLU CHECKWEIGH HI TOLERANCE**
  The acceptable tolerance above the target weight for each pack in the pack run.
  ***Example:*** target weight + 0.5 kg

  **PLU CHECKWEIGH TARGET**
  The target weight of the item.

  **PLU CHECKWEIGH STEP SIZE**
  The value of the graduation of the checkweigh bars used by the pack run.

- **COUNT**. Program counting parameters ***for use with a pack run***. For more information on counting see page 75.

  **DISABLE PLU PACK COUNTING**
  The pack run will not use the counting parameters.

  **PLU PIECE WEIGHT**
  Piece weight of the item for use with a pack run.

  **PLU COUNT TARGET**
  Number of items to be counted when using a pack run.

## SELECT PLU RECIPE

## SET PLU TARE STORE

Set a tare value to operate with the PLU.

For more information on Tares see *Tare / Net weighing* *on page 23*.

- **DISABLE TARE**. Tare not used.
- **SET STORE TARE INDEX**. Enter the number of the stored tare to be used. See also *TARES - Stored tares* *on page 123*.
- **SET TARE VALUE**. Enter the required tare (container) weight.

## SET PLU RECIPE AND ALARMS

***Note:*** *Only for advanced E12xx.*

You can select a recipe for a PLU and set up to five alarm target weights.

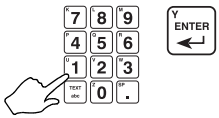
**To enter PLU RECIPE SETTINGS:**

1. Make sure you are in the **SUPER PLU MODE**.
2. Press **F1 - EDIT**.

**To select a PLU:**

There are two ways to select the PLU you want:

- If you know the ID of the PLU, enter the ID of the PLU you want to edit with the keyboard then press Enter.




**OR**

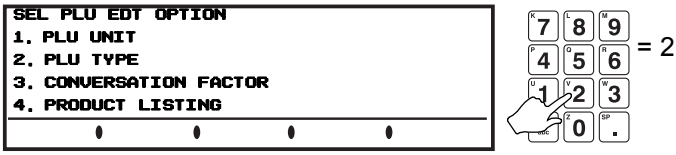
- If you do not know the ID of the PLU do as follow:

1. Press **F5 - BROWSE**.
2. Press **F1** and **F2** to scroll up and down the screen.
3. Press **F3** and **F4** to see the other pages.
4. Press **Enter** when the PLU you want is highlighted.

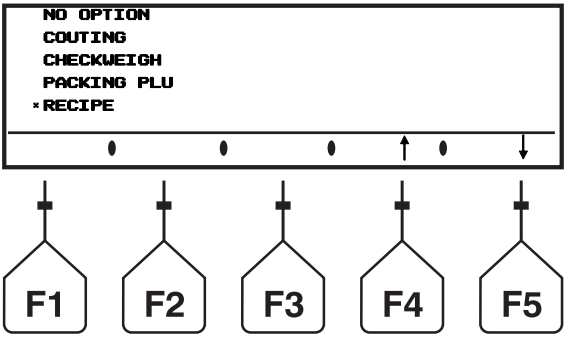
**Configure PLU TYPE for recipes:**

1. Press **F5** until **PLU TYPE** option is displayed.
2. Press the appropriate number on the keyboard to select **PLU TYPE**.

Example:




3. Press **F4** and **F5** to put the asterisk in front of **RECIPE** option.

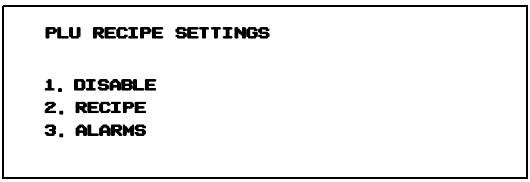



**To Set PLU RECIPE:**

1. Press **F5** until **PLU RECIPE SETTINGS** option is diplayed.
2. Press the appropriate number on the keyboard to select **PLU RECIPE SETTINGS**.
3. Press **F1 - YES** to alter values.

4. Use the keyboard to enter the option you want:

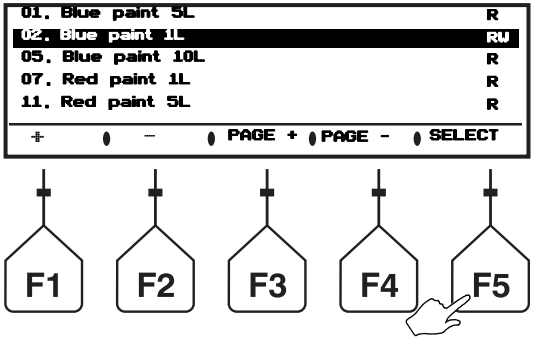
- Press 1 **-DISABLE** to disable this function.
- Press 2 **- RECIPE** to select a recipe for the PLU. (see page 172, To select a recipe.)
- Press 3 **- ALARMS** to select up to five alarms target weight. (see page 173, To set up alarms.)




**To select a recipe:**

1. Make sure you are in **PLU RECIPE SETTINGS**.
2. Press 2 **- RECIPE**.
3. Press **F1 - +** and **F2 - -** to scroll through the recipe displayed on the screen.
4. Press **F3 - PAGE +** and **F4 - PAGE -** to scroll through the pages.
5. When the recipe you want is highlighted, press **F5 - SELECT** to select it.

Example:



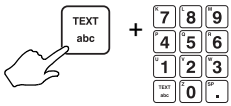

**To set alarms:**

1. Make sure the indicator is in **PLU RECIPE SETTINGS**.
2. Press 3 **- ALARMS**. The current settings will be displayed.
3. Enter with the keyboard the letter that corresponds to the alarm you want to set.

Example:

```
PLU RECIPE SETTINGS

A. ALARM ID 05     2,000 kg
B. ALARM ID 01     3,000 kg
C. ALARM ID       NONE
D. ALARM ID       NONE
E. ALARM ID 02      500 kg
```

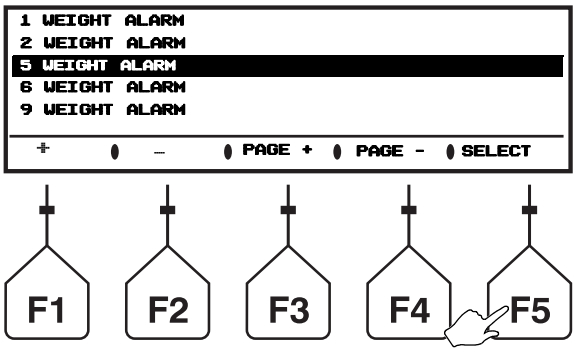



4. Use the '**F**' key to select from the following options:

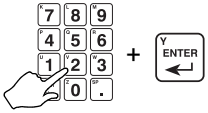
- **F1 - +**. To scroll down.
- **F2 - -**. To scroll up.
- **F3 - PAGE +**. To see the next page.
- **F4 - PAGE -**. To see previous page.

- **F5 - SELECT**. To select the highlighted alarm.

Example:




**5.** After you have selected an alarm, enter with the keyboard the target weight you want, then press **Enter**.




## SET PLU TOTALS

Each PLU has a totals store.

For each weighing transaction performed using a PLU the totals will be updated (usually when a print operation occurs).

This option allows you to view / edit the PLU totals.

- **EDIT SUB-TOTAL**. The current sub-total weight.
- **EDIT SUB-TOT COUNT**. The current sub-total count (counting PLUs only).
- **EDIT GRAND TOTAL**. The current grand total weight.
- **EDIT GRAND TOT COUNT**. The current grand total count (counting PLUs only).
- **STOCK LEVEL**. Normal weighbridge weight of the product minus dirt.
- **DIRT TOTAL**. The weight of waste which is thrown away.

***Note:*** *The method of totals operation depends upon indicator configuration.*

For more information on Totals see page 27.

## SET CYLF PARAMETERS

The indicator may be set to one of the following configurations by your Avery Weigh-Tronix centre on installation:

- cylinder filling - single fuel
- cylinder filling - single feed, dual fuel filling
- cylinder filling - dual fuel
- checkweighing (see page 39 )

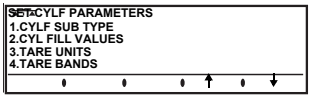
You can program a PLU to control either cylinder filling or to checkweigh gas cylinders. The options for SET CYLF PARAMETERS vary, depending on indicator configuration.

***Note:*** *The PLU must be programmed in the order shown on the display. Ensure PLU UNITS and PLU TYPE are selected before setting fill parameters.*

***Note:*** *SELECT EACH OF THE FOLLOWING OPTIONS AND ENTER THE SETTING EVEN IF YOU ARE NOT CHANGING THE STARRED SELECTION.*

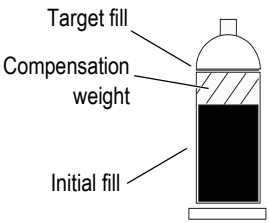
### Cylinder filling PLU

Press the number key to select the required function and program the PLU as follows:




- **CYLF SUB TYPE** (dual fuel only)
  If the indicator controls a dual fuel filling machine this option enables you to specify the gas to be dispensed.

- **CYL FILL VALUES**
  Fill values comprise the target value and the compensation value. The target value is the total fill weight. The compensation value is the top-up weight. This enables the indicator to pulse or slow fill the cylinder up to the desired fill weight after the initial fill.



- **TARE UNITS**
  You can use a different unit for the tare from that configured for weighing. This is useful if you have old cylinders calibrated in decimal pounds but the gas is filled in kilogrammes.

- **TARE BANDS**
  A tare band ensures that operators only enter an acceptable cylinder tare for the PLU to prevent under or overfilling. It is a safety feature to stop operators from trying to fill a small cylinder with a net fill which is too large. A tare band also helps to prevent incorrect tare entries affecting the totals count. Entering tare limits automatically enables this function.

  Enter the minimum tare weight for the PLU tare band (LO TARE BAND). Enter the maximum tare weight for the PLU tare band (HI TARE BAND). If you subsequently select the option DISABLE TARE BAND CHECK the programmed values are cleared.

- **MAX NEG NET WT**
  This option is used to check that the tare weight displayed on new cylinders is the correct net weight. It prevents empty cylinders with an unacceptably large marked tare weight from being filled. If the marked tare weight is too large the displayed net weight is a negative value. If the displayed negative value is greater than the maximum negative net weight programmed in the PLU, the indicator displays the message TARE OUT OF RANGE and prevents filling.

  Enter the negative net weight as a positive value, for example 1.00 kg. Filling will commence if the net weight is displayed as -0.99 but will not commence if the net weight is displayed as -1.01. If the maximum negative net weight is set to zero the function is disabled.

- **DOSE TIME (0.01 to 5 seconds)**
  This is the time the shut off valve is pulsed open during the final topping up of the cylinder after the initial filling cycle. The optimum setting depends on factors such as gas pressure and air pressure. Enter the dose time in seconds in multiples of 10, for example 0.25, up to a

maximum of 5 seconds. If the dose time is set to 0.00 the option is disabled and the machine will not pulse dose.

- **FAST TARE ENTRY**
  You can set the indicator to automatically enter the decimal point and the trailing zero when the operator enters the cylinder tare.

  *Example: Tare value 12.30 kg. Tare digits set to 4. Weight display shows 2 decimal places.*

  ***NORMAL*** - enter the tare as 12.30

  ***FAST*** - enter the tare as 1230 (standard setting)

  ***VERY FAST*** - enter the tare as 123; the zero is automatically entered by the system

- **NUM TARE DIGITS (2 to 5)**
  You can set the number of tare digits to be entered by the operator when using the PLU.

  *Example: Entering the tare value 12 kg. Weight display shows no decimal places.*

  ***2*** - enter the tare as 12

  ***3*** - enter the tare as 012

  ***4*** - enter the tare as 0012 (standard setting)

  ***5*** - enter the tare as 00012

- **LARGE TARE DISPLAY**
  The standard setting for the tare display when entered by the operator is large digits. If you set this function to NO in the PLU the tare is displayed in small digits.

- **EDIT CYL VALVE WT** (country specific)
  In some countries such as Australia the valve on the gas cylinder is not counted as part of the cylinder tare weight. This option enables you to enter the weight of the valve which the indicator adds to the operator entered tare weight. This ensures that the filling operation is more accurate as the tare is not under weight.

### Cylinder checkweigh PLU

**The PLU must be programmed in the order shown on the display. Ensure PLU UNITS and PLU TYPE are selected before setting gas parameters.**

**SELECT EACH OF THE FOLLOWING OPTIONS AND ENTER THE SETTING EVEN IF YOU ARE NOT CHANGING THE STARRED SELECTION.**

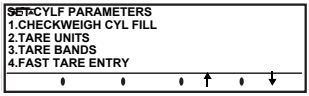
Cylinder checkweighing can only be programmed at an indicator configured for cylinder checkweigh operation.

Press the number key to select the required function and program the PLU as follows:

***General data:***

- **PLU UNITS -** Select the required unit.
- **PLU TYPE -** Set to CYLF.
- **SET PLU TARE STORE -** Enter the ***target fill weight*** either as a value (for example 50 kg) or as a reference to a stored tare.

***Fill parameters:***

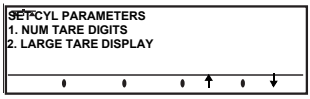



- **CHECKWEIGH CYL FILL -** Enter the accept band. For example, to accept at 50kg, to show underfill at 49 kg and overfill at 51 kg set the low accept limit to 0 and the high accept limit to 2.
- **TARE UNITS -** Enter the unit for the checkweigh tare. If you do not do this you will see the error message

  INVALID STORED/PLU TARE UNIT

- **TARE BANDS -** Not used.
- **FAST TARE ENTRY -** Set the method of entering the tare.

Press ***F5*** to display more functions. Then press the number key to select the required function.




- **NUM TARE DIGITS -** Enter the number of tare digits the operator must enter.
- **LARGE TARE DISPLAY -** Select the size of the tare display when entered by the operator.

# 9 RECIPE programming

Only applicable for indicators with the recipe application enabled. Contact your Avery Weigh-Tronix centre for details.

## 9.1 Recipes (RECIPE)

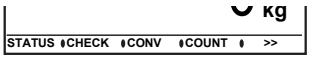
The indicator may have a number of connected devices. A recipe program allows the indicator to monitor inputs from these devices and set the outputs to these devices in order to control the flow of goods into a hopper, for example.

A sequence of output operations can be programmed, to depend upon a particular weight condition or the status of other devices connected to the indicator's inputs.

**To enter recipe configuration:**

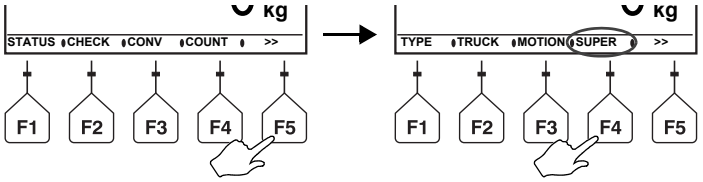
**1.** Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)

Example displays



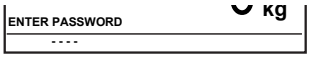

**2.** Press ***F5*** until the **SUPER** option is displayed, then press the appropriate **'*F'*** key to select.

Example

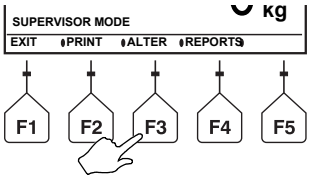



**3.** If prompted, enter the required password.

Default supervisor password

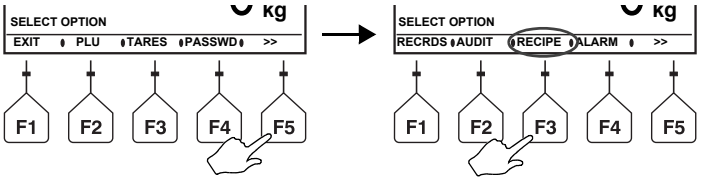


**4.** Press ***F3*** to select the **ALTER** menu.




**5.** Press ***F5*** until the **RECIPE** option is displayed, then press the appropriate ***F*** key to select.

Example




**6.** After pressing the ***RECIPE*** you'll see a screen similar to the example below.

**7.** Press ***PRINT*** to print all the recipes. Press ***DESCR*** and you'll see the following screen.

There are 50 text description fields related to recipes.

These description fields are configured in supervisor mode via the ***DESCR***. soft key.

Each description field may be assigned to any recipe ingredient step.

If you press ***SETUP*** see the instructions in section 9.2.

## 9.2 Create / Edit recipe

You can create and configure up to 100 recipe programs.

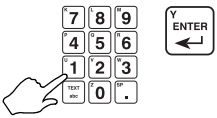
**To create / edit a recipe:**

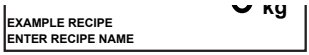
1. Enter recipe programming mode as shown on page 181.

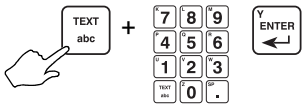
**Recipe ID & Name**

2. **RECIPE ID** (number 1 - 100). Enter the number of the recipe to be edited, or a new ID to create a new recipe program.

3. **RECIPE NAME** (up to 40 characters). Enter a description for the recipe.

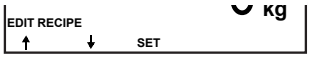


## 9.3 Recipe configuration options

1. Press ***F1*** and ***F2*** to cycle through the available options.



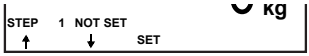

- **EDIT RECIPE**. Edit the selected recipe.
- **CLEAR RECIPE**. Delete the selected recipe.
- **COPY RECIPE**. Copy this recipe into another recipe ID.
- **PRINT**. List the data programmed for each step.

2. Press ***F3*** to **SET** an option:

### 9.3.1 EDIT - Edit selected recipe

A recipe comprises up to 50 steps which will run sequentially when the recipe is in operation.

- Use the ***'F'*** keys to select the required step. Then program the step.



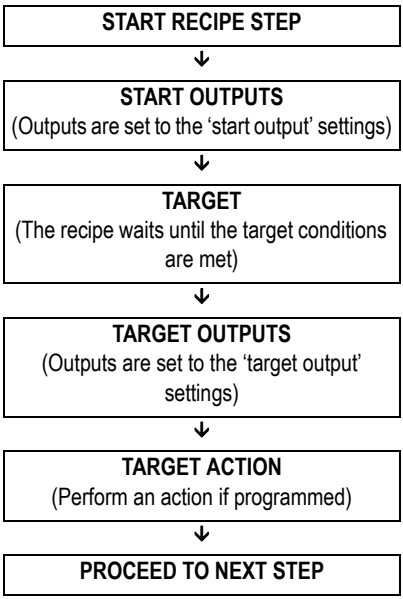

Each step can be programmed with the following data:

- **SET PROPERTIES**. You can choose between three properties for the recipe: Editable, Saveable or Not Editable.
- **SET TARGET**. The target / condition required in order for the indicator to process this step.
- **SET START OUTPUTS**. When commencing a step the indicator sets device outputs to the states defined here. See *Input / Output states* *on page 193* for details.
- **SET TARGET OUTPUTS**. When the target has been achieved device outputs are set to the states defined here. See *Input / Output states* *on page 193* for details.
- **SET TARGET ACTION**. Only for steps with a target type set to 'WEIGHT'. The action performed by the indicator when the target is achieved, see page 191.
- **SET TARGET PLU**. If the target action is set to 'TOTALS' you can specify the PLU to accumulate totals for the recipe step, see page 191.

- **SET STEP NAME**. This is a free text field that can be used to describe the step action or target, see page 191.

### Recipe sequence

When the recipe is running output and target settings are used in the following sequence.


START RECIPE STEP
START OUTPUTS
(Outputs are set to the 'start output' settings)
TARGET
(The recipe waits until the target conditions are met)
TARGET OUTPUTS
(Outputs are set to the 'target output' settings)
TARGET ACTION
(Perform an action if programmed)
PROCEED TO NEXT STEP

## SET TARGET

The target defines the conditions which must be met in order for the indicator to progress to the next step. The target conditions can relate to the measured weight or the state of the input / output devices connected to the indicator.

- Use the ***'F'*** keys to program the following:

| Target type | Options | Description/Setting |
|---|---|---|
| **NONE** | | No target set |
| | | |
| **WEIGHT** | | Target is a weight condition |
| | • Weight type | Select whether the target value is the:<br>**0=Relative gross weight**<br>**1=Relative net weight**<br>**2=Absolute gross weight**<br>**3=Absolute net weight**<br>A relative weight enables you to add an ingredient weight even if the previous weight was slightly out. |
| | • Wt condition | Select whether or not a stable weight is required in order to meet the target value.<br>**0 = Unstable**<br>**1 = Steady weight** |
| | • Weight target | Enter the target weight. |
| | • Wt tolerance + | Set the weight tolerance above the desired target weight.<br>If the measured weight is outside of the stated tolerance, the user may be required to intervene (depending upon system configuration). |
| | • Wt tolerance - | Set the weight tolerance below the desired target weight.<br>If the measured weight is outside of the stated value automatic or manual dosing may be used to top-up the weight or other operator intervention may be requested (depending upon your configuration). |

| Target type | Options | Description/Setting |
|---|---|---|
| | • Target comp | When running the recipe, there may be a predictable difference between the weight measured at 'shut-off' and the final weight of goods on the scale, for example due to the pressure of a jet of liquid when filling.<br>The difference in weight is known as the 'in-flight' compensation value. It allows the scale to compensate and ensure that the target weight is met.<br><br>**Example 1**<br>Filling from a hopper where 2 kg of material is 'in-flight' when the hopper is shut off.<br><br>*Target comp = 2 kg.*<br><br>**Example 2**<br>Liquid filling, where the liquid jet exerts 12 kg of pressure on the scale.<br><br>*Target comp = -12 kg.* |
| | • Comp type | The target comp value can be adjusted automatically by the indicator in line with the 'in-flight' value actually encountered when the recipe runs.<br><br>**0=Manual**. The in-flight value is not adjusted.<br>**1=Automatic**. The in-flight compensation is automatically updated. |

| Target type | Options | Description/Setting |
|---|---|---|
| | • Weight dosing | When the weight on the scale is under the minimum acceptable weight specified by the TOLERANCE + value operators can top up the weight manually or the indicator can top up the weight automatically.<br><br>**0=Manual**. The operator must manually top-up the weight to bring it within tolerance.<br><br>**1=Automatic**. The scale automatically tops-up the weight. The indicator reverts all outputs to their 'start' settings for the number of seconds defined for the dosing time. |
| | • Dose time period | The number of seconds the indicator maintains output start settings when weight dosing. |
| | • Weight index link | A target weight can be linked to the next weight in a following step or the last weight in a previous step.<br><br>**0= No link**. Target weight is an absolute value.<br>**1= Next weight**. Target weight is linked to the next weight in a following step.<br>**2= Last weight**. Target weight is linked to the last weight in a previous step. |
| | • Compensation Limit | This limits the compensation adjustment amount. |

| Target type | Options | Description/Setting |
|---|---|---|
| **STATUS** | | The indicator status must meet a number of defined conditions. |
| | • Status on (1-4) | Configure up to 4 conditions that must be **TRUE**, from the following:<br>1= Gross weight display<br>2=Net weight display<br>3=Gross zero<br>4=Weight steady<br>5=Weight not steady<br>6=Keyboard tare set<br>7=Push-button tare set<br>8=Weight under-range<br>9=Weight over-range<br>10=Enter key pressed<br>11=Checkweigh under<br>12=Checkweigh accept<br>13=Checkweigh over<br>14=Count target<br>15=Count under target<br>16= Net zero<br>17=Error condition<br>18=Tolerance +<br>19=Tolerance -<br>20=Gross zero band<br>21=COM1 transmit OK<br>22=COM2 transmit OK<br>23=COM3 transmit OK<br>24=COM4 transmit OK<br>25=Gross or Net zero |

| Target type | Options | Description/Setting |
|---|---|---|
| | • Status off (1-4) | Configure up to 4 conditions that must be **FALSE**, from the following:<br>1= Gross weight display<br>2=Net weight display<br>3=Gross zero<br>4=Weight steady<br>5=Weight not steady<br>6=Keyboard tare set<br>7=Push-button tare set<br>8=Weight under-range<br>9=Weight over-range<br>10=Enter key pressed<br>11=Checkweigh under<br>12=Checkweigh accept<br>13=Checkweigh over<br>14=Count target<br>15=Count under target<br>16= Net zero<br>17=Error condition<br>18=Tolerance +<br>19=Tolerance -<br>20=Gross zero band<br>21=COM1 transmit OK<br>22=COM2 transmit OK<br>23=COM3 transmit OK<br>24=COM4 transmit OK<br>25=Gross or Net zero |
| | | |
| **INPUT** | | Specifies the status of device inputs as the target. To achieve target the inputs from connected devices must match the settings configured here. |
| | • Input target type | NOT USED BY RECIPES. Only used when programming an alarm. |
| | • Input target values | Set the required state for the inputs.<br>(See *Input / Output states* *on page 193* for details) |

| Target type | Options | Description/Setting |
|---|---|---|
| **OUTPUT** | | The target is the status of the output of connected devices. |
| | • Output target values | Set the required state for the outputs. (See *Input / Output states* on page 193 for details) |
| | | |
| **TIME** | | Target is a timer. |
| | | Enter the number of seconds the recipe step pauses (with outputs in the 'start' condition) after which time the recipe proceeds. |
| **TARGET PULSE COUNTER** | | A numeric entry field for use with flow meters. Use this to set the number of pulses from the flow meter which will cause an action. |

## SET START OUTPUTS

When commencing a step the indicator sets device outputs to the states defined here. See *Input / Output states* on page 193 for details.

## SET TARGET OUTPUTS

When the target has been achieved device outputs are set to the states defined here. See *Input / Output states* on page 193 for details.

## SET TARGET ACTION

Only where SET TARGET (page 184) is set to WEIGHT or INPUT.

- Enter one of the numbers shown in the list below. Upon reaching its target, the indicator performs the chosen action.

  **0** - No action
  **1** - Push-button tare
  **2** - Print
  **3** - Add to scale total
  **4** - Zero
  **5** - Accept
  **6** - Cancel tare

**9** - Recipe total add
**10** - Recipe total subtract
**14** - Keyboard disable
**15** - Keyboard enable

## SET TARGET PLU

You can specify the PLU to accumulate totals for the recipe step.

The following conditions must be met:

- TARGET must be a weight (see page 186).
- TARGET ACTION must be update totals (see page 192).

## 9.4 Input / Output states

The indicator has up to 16 inputs and 16 outputs which are used within the recipe application.

When configuring the recipe you will be required to specify the state of the inputs or outputs to enable the indicator to either:

- check if the physical inputs and outputs for devices are in the required states

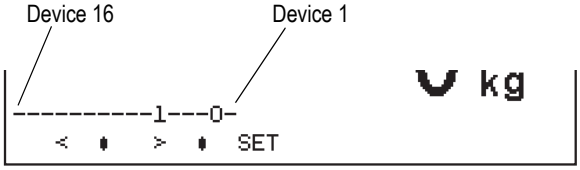
*OR*

- set the outputs to the states specified.

### Setting the Input / Output states

(Example display)

Devices are numbered from 16 (left) to 1(right)




Function 'F' keys:

| | |
|---|---|
| **F1** = < | Select input / output to left |
| **F2** = > | Select input / output to right |
| **F3** = SET | Accept settings |

Settings (Use Keypad)

| | |
|---|---|
| **0** = | Input / Output OFF |
| **1**= | Input / Output ON |
| **- (Press *C/CE*)** | Ignore / Leave as is |

**NOTE:** Indicators without an external device interface support only devices 1 to 3. As 16 digits are displayed even though only 3 devices are supported ensure you configure the correct digits for devices 1 to 3.

# 10 ALARMS

## 10.1 Introduction

The indicator may be connected to a number of input and output devices. An alarm allows the indicator to monitor a particular weight condition or the status of input devices. When the configured conditions have been met the indicator resets device outputs, for example sets a bell on, and performs an action such as waits for the Enter key to be pressed.

You can program up to 10 alarms. Each alarm can be configured with its own action. Alarms run in the background constantly looping from alarm 1 to alarm 10.

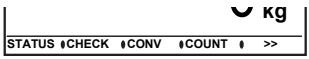
*The alarms remain active in all weighing modes and applications. Whenever the alarm condition is met the required outputs are set*.

**To enter alarm configuration:**

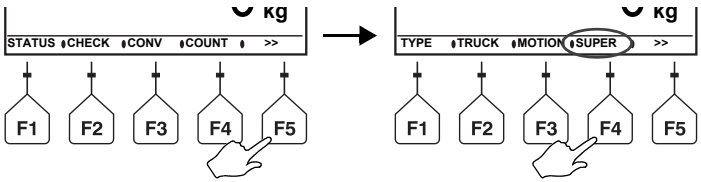
**1.** Ensure the indicator is in operator mode. (Press ***ESC*** if necessary.)

**2.** Press ***F5*** until the **SUPER** option is displayed, then press the appropriate ***'F'*** key to select.

Example displays

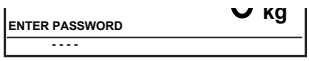



Example

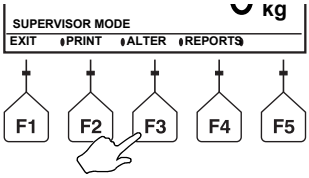


**3.** If prompted, enter the required password.

Default supervisor password

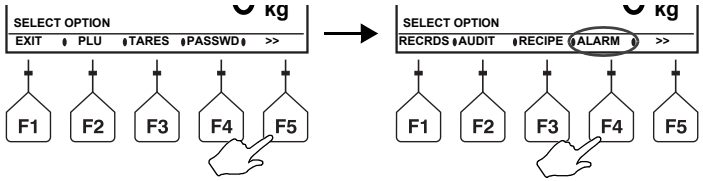



**4.** Press ***F3*** to select the **ALTER** menu.




**5.** Press ***F5*** until the **ALARM** option is displayed, then press the appropriate ***F*** key to select.

Example



## 10.2 Create / Edit alarm

You can create and configure up to 10 alarms.

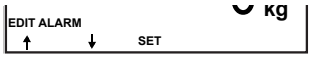
***Note:*** *We recommend that e-tools be used to create alarms.*

**To create / edit an alarm:**

1. Enter alarm programming mode as shown on page 195.
2. **ALARM INDEX** (number 1 - 10). Enter the number of the alarm to be edited, or a new index to create a new alarm.

## 10.3 Alarm configuration options

1. Press ***F1*** and ***F2*** to cycle through the available options.




- **EDIT ALARM**. Edit the selected alarm.
- **CLEAR ALARM**. Delete the selected alarm.
- **PRINT.** List the data programmed for each alarm.

2. Press ***F3*** to **SET** an option:

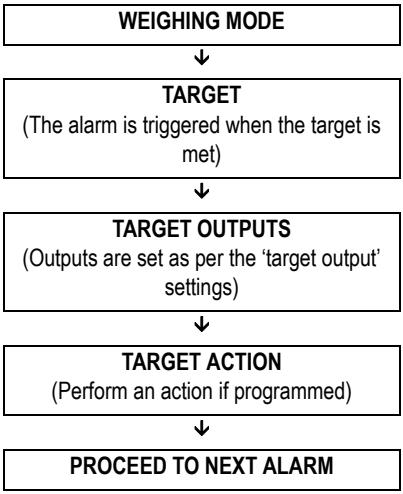
### 10.3.1 EDIT - Edit selected alarm

An alarm must be programmed with the following data:

- **SET TARGET**. The target / condition required in order for the indicator to trigger the alarm.
- **SET TARGET OUTPUTS**. Once the target is met the indicator sets the outputs as defined here. See *Input / Output states* *on page 204* for details.
- **SET TARGET ACTION**. Only for alarms with a target type set to ‘INPUT’. Once the target is met the indicator performs the action specified, see page 202.

### Alarm sequence

When an alarm is set the output and target settings are used in the following sequence.


WEIGHING MODE
TARGET
(The alarm is triggered when the target is met)
TARGET OUTPUTS
(Outputs are set as per the 'target output' settings)
TARGET ACTION
(Perform an action if programmed)
PROCEED TO NEXT ALARM

## SET TARGET

The target defines the conditions which must be met in order for the indicator to progress to the next step. The target conditions can relate to the measured weight or the state of the input / output devices connected to the indicator.

- Use the ***'F'*** keys to program the following:

| Target type | Options | Description/Setting |
|---|---|---|
| **NONE** | | No target set. |
| | | |
| **WEIGHT** | | Target is a weight condition. |
| | • Weight type | Select whether the target value will be for a:<br>**0 = Gross weight**<br>**1 = Net weight** |
| | • Weight target | Enter the target weight. |
| **STATUS** | | The indicator status must meet a number of defined conditions. |

| Target type | Options | Description/Setting |
|---|---|---|
| | • Status on (1-4) | Set up to 4 conditions that must be **TRUE**, from the following:<br>1= Gross weight display<br>2=Net weight display<br>3=Gross zero<br>4=Weight steady<br>5=Weight not steady<br>6=Keyboard tare set<br>7=Push-button tare set<br>8=Weight under-range<br>9=Weight over-range<br>10=Enter key pressed<br>11=Checkweigh under<br>12=Checkweigh accept<br>13=Checkweigh over<br>14=Count target<br>15=Count under target<br>16= Net zero<br>17=Error condition<br>18=Tolerance +<br>19=Tolerance -<br>20=Gross zero band<br>21=COM1 transmit OK<br>22=COM2 transmit OK<br>23=COM3 transmit OK<br>24=COM4 transmit OK<br>25=Gross or Net zero |

| Target type | Options | Description/Setting |
|---|---|---|
| | • Status off (1-4) | Set up to 4 conditions that must be **FALSE**, from the following:<br>1= Gross weight display<br>2=Net weight display<br>3=Gross zero<br>4=Weight steady<br>5=Weight not steady<br>6=Keyboard tare set<br>7=Push-button tare set<br>8=Weight under-range<br>9=Weight over-range<br>10=Enter key pressed<br>11=Checkweigh under<br>12=Checkweigh accept<br>13=Checkweigh over<br>14=Count target<br>15=Count under target<br>16= Net zero<br>17=Error condition<br>18=Tolerance +<br>19=Tolerance -<br>20=Gross zero band<br>21=COM1 transmit OK<br>22=COM2 transmit OK<br>23=COM3 transmit OK<br>24=COM4 transmit OK<br>25=Gross or Net zero |
| | | |
| **INPUT** | | Specifies the status of device inputs as the target. To achieve target the inputs from connected devices must match the settings configured here. |

| Target type | Options | Description/Setting |
|---|---|---|
| | • Input target type | Set whether the TARGET ACTION (see page 202) will be:<br>**0=Multishot** . The target action is performed each time the indicator detects the target input pattern.<br>**1=Single shot**. The target action is repeated only when inputs change and then return to the configured pattern. |
| | • Input target values | Set the required state for the inputs.<br>(See *Input / Output states on page 204* for details) |
| | | |
| **OUTPUT** | | Indicator outputs must be in the required state for the target to be met. |
| | • Output target values | Set the required state for the outputs.<br>(See *Input / Output states on page 204* for details) |

## SET TARGET OUTPUTS

When the target has been achieved device outputs are set to the states defined here. See *Input / Output states on page 204* for details.

## SET TARGET ACTION

Only where SET TARGET (page 201) is set to INPUT.

- Enter one of the numbers in the following list. Upon reaching its target, the indicator performs the chosen action.

  **0** - No action
  **1** - Push-button tare
  **2** - Print
  **3** - Add to scale total
  **4** - Zero
  **5** - Accept
  **6** - Cancel tare
  **7** - Abort
  **8** - Switch scale
  **11** - Enter key

**12** - Pause Recipe
**13** - Resume Recipe
**14** - Keyboard Disable
**15** - Keyboard Enable
**16** - Start Recipe
**17** - Reset Recipe

## 10.4 Input / Output states

The indicator has up to 16 inputs and 16 outputs which are used within the alarm application.

When configuring the recipe you will be required to specify the state of the inputs or outputs to enable the indicator to either:

- check if the physical inputs and outputs are in the required states

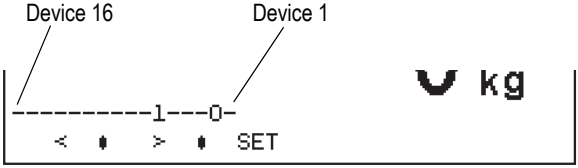
*OR*

- set the outputs to the states specified.

### Setting the Input / Output states

(Example display)

Devices are numbered from 16 (left) to 1(right)




Function 'F' keys:

| | |
|---|---|
| **F1** = < | Select input / output to left |
| **F2** = > | Select input / output to right |
| **F3** = SET | Accept settings |

Settings (Use Keypad)

| | |
|---|---|
| **0** = | Input / Output OFF |
| **1**= | Input / Output ON |
| **- (Press *C/CE*)** | Ignore / Leave as is |

**NOTE:** Indicators without an external interface support only devices 1 to 3. As 16 digits are displayed even though only 3 devices are supported ensure you configure the correct digits for devices 1 to 3.

# Appendices

## Appendix A - ASCII codes

Certain aspects of the configuration may require the entry of an ASCII code.
Used for example to set the time and date separators (see *CLOCK - Date and time* *on page 129*).

### Table of ASCII codes

| ASCII Code | Token | ASCII Code | Token | ASCII Code | Token | ASCII Code | Token |
|---|---|---|---|---|---|---|---|
| 001 | SOH | 002 | STX | 003 | ETX | 004 | EOT |
| 005 | ENQ | 006 | ACK | 007 | BEL | 008 | BS |
| 009 | HT | 010 | LF | 011 | VT | 012 | FF |
| 013 | CR | 014 | SO | 015 | SI | 016 | DLE |
| 017 | DC1 | 018 | DC2 | 019 | DC3 | 020 | DC4 |
| 021 | NAK | 022 | SYN | 023 | ETB | 024 | CAN |
| 025 | EM | 026 | SUB | 027 | ESC | 028 | FS |
| 029 | GS | 030 | RS | 031 | US | 032 | SP |
| 033 | ! | 034 | | 035 | £ | 036 | $ |
| 037 | % | 038 | & | 039 | | 040 | ( |
| 041 | ) | 042 | * | 043 | + | 044 | , |
| 045 | - | 046 | . | 047 | / | 048 | 0 |
| 049 | 1 | 050 | 2 | 051 | 3 | 052 | 4 |
| 053 | 5 | 054 | 6 | 055 | 7 | 056 | 8 |
| 057 | 9 | 058 | : | 059 | ; | 060 | < |
| 061 | = | 062 | > | 063 | ? | 064 | @ |
| 065 | A | 066 | B | 067 | C | 068 | D |
| 069 | E | 070 | F | '071 | G | 072 | H |
| 073 | I | 074 | J | 075 | K | 076 | L |

| ASCII Code | Token | ASCII Code | Token | ASCII Code | Token | ASCII Code | Token |
|---|---|---|---|---|---|---|---|
| 077 | M | 078 | N | 079 | O | 080 | P |
| 081 | Q | 082 | R | 083 | S | 084 | T |
| 085 | U | 086 | V | 087 | W | 088 | X |
| 089 | Y | 090 | Z | 091 | [ | 092 | \ |
| 093 | ] | 094 | ^ | 095 | _ | 096 | |
| 097 | a | 098 | b | 099 | c | 100 | d |
| 101 | e | 102 | f | 103 | g | 104 | h |
| 105 | i | 106 | j | 107 | k | 108 | l |
| 109 | m | 110 | n | 111 | o | 112 | p |
| 113 | q | 114 | r | 115 | s | 116 | t |
| 117 | u | 118 | v | 119 | w | 120 | x |
| 121 | y | 122 | z | 123 | { | 124 | \| |
| 125 | } | 126 | ~ | 127 | DEL | 128 | |

# Appendix B - PC function keys

If the indicator has a connected PC keyboard pressing the F1 to F10 keys performs the following indicator functions:

F1 = F1 Function Select on Indicator

F2 = F2 Function Select on Indicator

F3 = F3 Function Select on Indicator

F4 = F4 Function Select on Indicator

F5 = F5 Function Select on Indicator

F6 = Tare Key

F7 = Select Key

F8 = Zero Key

F9 = Print Key

F10 = Units Key

The address of your Avery Weigh-Tronix centre is:

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